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DISTRIBUTION OVER A 45° SWEPTBACK WING AT

MACH NUMBERS FROM 0.60 TO 1.03

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and George Liner

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SUMMARY

An investigation was conducted with 73-percent-semispan inboard spoiler ailerons, projecting 4 percent of the local chord from the wing surface, and located at the 70-percent-chord line of a 45° sweptback-wing—fuselage combination. The model consisted of a wing with an aspect ratio of 3.98, taper ratio of 0.61, and NACA 65A006 airfoil sections parallel to the plane of symmetry in combination with a fuselage of fineness ratio 10. Pressure data were measured on the wing and spoiler at several spanwise stations at Mach numbers from 0.60 (Reynolds number 5.1×10^6) to 1.03 (Reynolds number 6.2×10^6) for angles of attack that usually extended to 20° or more.

Upper-surface spoilers resulted in normal-force decrements which were largest in the 0.6 to 0.8 semispan area of the wing for low and moderate angles of attack. Most of this decrement was associated with increased upper-surface pressures ahead of the spoiler, but some of the decrement resulted from decreased lower-surface pressures. The addition of a gap through the wing behind the spoiler relieved the low pressure behind the spoiler on the upper surface and thus increased the rolling effectiveness. Lower-surface spoilers give reversed rolling-moment effectiveness at angles of attack higher than about 10° primarily because there is a large decrease in pressure behind the spoiler on the lower wing surface at the higher angles of attack.

Spoiler loads were highest at the inboard end. For upper-surface spoilers, the loads on the spoiler decreased rapidly with increasing angle of attack, but for lower-surface spoilers they increased to the highest test angles of attack.

INTRODUCTION

Recently there has been considerable interest in spoiler ailerons, primarily because they maintain rolling effectiveness through the transonic speed range (ref. 1) and because they provide high reversal speeds for thin flexible wings. In addition, they can be designed to have very low hinge moments. However, very few pressure data for spoiler configurations have been available at high subsonic and transonic speeds (refs. 2 and 3) for load calculations or for studying the effects of spoilers on the flow about a wing.

Hence, a systematic test program has been initiated in the Langley 16-foot transonic tunnel to provide pressure data for various spoiler configurations in the transonic speed range at moderately high Reynolds numbers for a large angle-of-attack range. The initial investigation of this program was conducted on a 6-percent-thick 45° sweptback-wing—fuselage combination at 0° yaw and Mach numbers from 0.60 to 1.03. The spoilers investigated on this wing were of the retractable type, and they extended along the 70-percent-chord line from the fuselage (14 percent of the wing semispan) to 87 percent of the wing semispan and had a projection from the wing surface of 4 percent of the local wing chord.

This paper presents results for some of the configurations that were tested during the initial investigation. The effects of upper- and lower-surface spoilers and of a wing gap behind the spoilers are shown on the wing normal-force characteristics, chordwise pressure distributions, span-load distributions, and centers of load. Also included are tabulated wing static-pressure coefficients, spoiler pressure distributions, and spoiler span-load distributions. A limited amount of summary data from this investigation has already been published (ref. 4), and six-component force data obtained simultaneously with the pressure data are presented in reference 5.

SYMBOLS

b   wing span

c   section wing chord

$\bar{c}$ average wing chord

c'   wing mean aerodynamic chord

$c_m \dfrac{c^2}{\overline{c}c'}$ wing-section pitching-moment parameter with moment about the 25-percent position of the mean aerodynamic chord,

$$\frac{c^2}{\overline{c}c'} \int_0^1 \left(P_L - P_U\right)\left(\frac{x_1}{c} - \frac{x}{c}\right) d\frac{x}{c}$$

$c_n \dfrac{c}{\overline{c}}$ wing-section normal-load parameter,

$$\frac{c}{\overline{c}} \int_0^1 \left(P_L - P_U\right) d\frac{x}{c}$$

$c_{n_s} \dfrac{h}{\overline{h}}$ spoiler-section load parameter which acts parallel to plane of symmetry and perpendicular to h at a given spanwise station,

$$\frac{h}{\overline{h}} \int_0^1 \left(P_F - P_R\right) d\frac{z}{h}$$

C_N wing-panel normal-force coefficient,

$$\int_{0.135}^{1.0} c_n \frac{c}{\overline{c}} \, d\frac{y}{b/2}$$

C_l rolling-moment coefficient

h length of chord of exposed front face of spoiler at any spanwise station

$\overline{h}$ average h, $\dfrac{(h \text{ at } 0.14b/2) + (h \text{ at } 0.87b/2)}{2}$

M free-stream Mach number

P pressure coefficient, $\dfrac{p - p_0}{q}$

p local static pressure

p_0 free-stream static pressure

q free-stream dynamic pressure

x distance from wing leading edge at a given spanwise station, positive downstream

x_1 distance from wing leading edge at a given spanwise station to line perpendicular to plane of symmetry and passing through 25-percent position of mean aerodynamic chord, positive downstream

$\dfrac{x_{cp}}{c}$ longitudinal location of wing-section center of pressure,

$$0.25 - \frac{\displaystyle\int_0^1 \left(P_L - P_U\right)\left(0.25 - \frac{x}{c}\right)d\frac{x}{c}}{c_n}, \text{ fraction of section}$$

wing chord

$\dfrac{X_{cp}}{c'}$ longitudinal location of wing-panel center of pressure,

$$0.25 - \frac{\displaystyle\int_{0.135}^{1.0} \left(c_m \frac{c^2}{cc'}\right)d\frac{y}{b/2}}{C_N}, \text{ fraction of mean aerodynamic chord}$$

y spanwise distance from the plane of symmetry

$\dfrac{Y_{cp}}{b/2}$ lateral location of wing-panel center of pressure,

$$\frac{\displaystyle\int_{0.135}^{1.0} \left(c_n \frac{c}{\bar{c}}\right)\left(\frac{y}{b/2}\right)d\frac{y}{b/2}}{C_N}, \text{ fraction of semispan}$$

z distance measured from wing surface along h at a given spanwise station (not perpendicular to x- and y-axes)

α angle of attack of fuselage center line relative to test-section center line

ΔP change in P across spoiler at a given spanwise station (P at 0.65c - P at 0.75c)

Subscripts:

F forward surface of spoiler

L lower surface of wing

R rear surface of spoiler

U upper surface of wing

APPARATUS AND TESTS

Tunnel.- The investigation was conducted in the Langley 16-foot transonic tunnel, which is a single-return wind tunnel having a slotted throat of octagonal cross section. The maximum variation of average Mach number was about ±0.002 along the test-section center line in the vicinity of the model. Additional details of the test-section configuration and of the calibration of the tunnel are given in reference 6.

Model.- Figures 1 and 2 show details of the basic model and the spoiler configurations included in this investigation. The steel wing had NACA 65A006 airfoil sections parallel to the plane of symmetry, quarter-chord line sweep of 45°, taper ratio of 0.61, and aspect ratio of 3.98. The wing was designed to have no incidence, dihedral, or twist and was mounted in a midwing position on the fuselage. The fuselage, constructed of steel, had a fineness ratio of 10, and the quarter chord of the wing mean aerodynamic chord was located at the longitudinal position of the maximum fuselage diameter.

The spoilers for these tests (fig. 1) simulated retractable spoiler-aileron configurations pivoted about the 50-percent-chord line. These spoilers were located along the 70-percent-chord line of the wing and were projected four percent of the local wing chord from the wing surface. They extended from the fuselage (14 percent of the wing semispan) to the 87-percent wing semispan and had a sweep angle of 41.6°. Spoilers were tested without and with a gap in the wing behind the spoiler. The gap, when used, extended outboard from the 15-percent to the 87-percent wing semispan station. The lower-surface spoiler with gap configuration was obtained by inverting the model with upper-surface spoiler and wing gap. The oppositely deflected spoiler configuration had one spoiler mounted on the upper surface of the left wing and one on the lower surface of the right wing with no gap behind the spoilers.

Figure 2 shows location of the wing static-pressure orifices which were distributed over the left wing at seven spanwise stations. The orifices at the inboard station $\left(\text{average } \dfrac{y}{b/2} = 0.135\right)$ were actually located on the fuselage 0.1 inch from the wing surface. Pressure orifices were also located on the front and rear surfaces of the left wing spoiler and in the wing gap behind this spoiler at five spanwise stations as shown in figure 2. The pressures were transmitted by means of small tubing through the model support system to mercury manometer boards.

Model support system.- A cantilever strut, described in reference 7, supported the sting-mounted model. The model was near the tunnel center line at all angles of attack. A straight coupling between the sting and

the model permitted variations in the angle of attack from -4° to 15°; a 10° coupling extended the range.

Tests.- Tests were generally made for all configurations at angles of attack of -2° to 26° for Mach numbers from 0.60 to 0.90. At Mach numbers from 0.94 to 1.03, the maximum angle of attack of these tests was limited by sting-support stresses or available tunnel power.

The Reynolds number variation over the Mach number range of the tests is shown in figure 3.

DATA REDUCTION

Data reduction methods.- Extensive use of a punched-card system greatly facilitated the reduction of data. Pressure data recorded with manometer board cameras were first transferred to cards by the use of a commercially available manual film reading device coupled to a card-punch machine. The data were then processed on electronic computing machines to obtain individual pressure coefficients as well as section normal-force and pitching-moment coefficients (using a rectangular step integration). The data cards were then fed to an automatic plotting device for the preparation of the chordwise pressure plots of this paper and were also used to prepare the tables of pressure data.

Corrections.- The angles of attack presented include an adjustment for an incremental angle determined from static calibration of the model angular deflection as a function of pitching moment and normal-force loads. Based on the repeatability of deflection measurements made during the static calibrations, the estimated maximum error of the angle-of-attack measurements is ±0.1°. No corrections were made for tunnel-flow angularity. The cumulative effect of model asymmetry and tunnel flow angularity is shown to be small by the basic model normal-force curves in figure 5. No corrections were made for sting interference. Sting interference was not considered of importance for these tests because all lateral-control configuration changes were made on the wing, which was relatively remote from the sting. The data have not been corrected for tunnel boundary-interference effects since the results of reference 8 indicate that these effects would be small.

In calculating wing section and panel coefficients, the effect of the forces on the spoiler was neglected. The magnitude of the error thus introduced was checked and found to be within the accuracy of the data.

RESULTS AND DISCUSSION

Static-pressure measurements are given in coefficient form for the basic wing and the several spoiler configurations as follows:

Table	Static-pressure coefficients for -	Page
I	Basic wing	19 to 43
II	Wing with upper-surface spoiler (no gap)	44 to 63
III	Wing with upper-surface spoiler (with gap)	64 to 88
IV	Wing with lower-surface spoiler (with gap)	89 to 104

Each table shows the pressure coefficients at seven spanwise wing stations for various Mach numbers and angles of attack. Some of the high-angle-of-attack data for the upper-surface spoiler without gap and for the lower-surface spoiler with gap have been omitted since these configurations are of less interest because of loss of effectiveness or reversal at high angles of attack. No data have been tabulated for the oppositely deflected spoiler configuration, since, as will be shown, these were only slightly different from the data presented in table II.

In discussing the test results, some of the more important effects of spoiler operation on panel and section characteristics are first noted. Subsequent discussion makes use of chordwise pressure distributions to illustrate the manner in which the various spoiler configurations affect the air flow and the load distribution over the swept wing. Finally, the effect of a lower-surface spoiler on the opposite wing loading is considered and loads on the spoilers are discussed.

In figures which show comparisons at one angle of attack, the angle of attack given is an average for the compared configurations. This average does not differ more than $\pm 0.15^\circ$ from the extreme value for any of the compared configurations.

Effect of Spoiler on Wing-Panel Loading

Since the rolling-moment coefficients produced by the spoiler configurations are given in reference 5, there was no need to integrate the present pressure data for rolling moment. In order to be certain,

however, that such integrations would indicate the same rolling moments
as were measured with the strain-gage balance, integrations have been
carried out for a few pressure-data points. A comparison with the bal-
ance measurements is made in figure 4. Even though the chordwise pres-
sure force rolling-moment component (about the stability roll axis) has
been neglected, as have crossover effects from the left wing to the right
wing, agreement between the two sets of data is generally excellent. It
is concluded, therefore, that an analysis of the pressure measurements
made in these tests will help to provide a correct understanding of the
functioning of a spoiler as a lateral control.

Figure 5 shows the variation of integrated wing normal-force coef-
ficient with angle of attack at all test Mach numbers for the basic wing
and three spoiler configurations. As in reference 5, the upper-surface
spoilers caused decreases in normal-force coefficient which were largest
in the region of 4° to 6° and which became small at the higher angles of
attack. The presence of a gap through the wing behind the spoiler pro-
vided an additional decrement which was more or less constant throughout
the angle-of-attack range. The beneficial effect of such a wing gap at
transonic speeds has been previously shown. (For example, see ref. 9.)
A lower-surface spoiler provided an increase in wing normal force at the
lower angles of attack but a reversal was indicated for angles of attack
above about 10° as was also shown in reference 5.

The increments in normal-force coefficient in figure 5 caused by
operation of the spoiler were about twice the magnitude of the lift-
coefficient increments shown on a similar figure in reference 5 for the
same configurations. The reason for this effect was that the lift coef-
ficient in reference 5 was based on total wing area, whereas the normal-
force coefficient in this report was based on the semispan wing area.

Figures 6 and 7 show, respectively, the longitudinal and lateral
locations of wing-panel center of pressure for the basic wing and three
spoiler configurations at all test Mach numbers. These curves show dis-
continuities at some low angle of attack in both longitudinal and lateral
center-of-pressure locations. These discontinuities indicate that, for
an upper-surface spoiler, there was extensive positive loading inboard
and negative loading outboard for the condition of zero panel lift.

Changes in center-of-pressure location caused by operation of the
upper-surface spoiler were generally less for the spoiler with no gap
than for the spoiler with a gap. At moderately high angles of attack, the
center-of-pressure locations were affected only slightly by the spoilers,
although the spoilers were still effective in reducing normal force at
these angles. (See fig. 5.)

Effect of Spoiler on Wing Section Loadings

Figure 8 presents the semispan load distributions for the basic wing and the three spoiler configurations at all test Mach numbers. For the lower angles of attack, when the spoilers were most effective, the important loading changes caused by the spoiler occurred outboard of 0.3 semispan, the largest decrements being in the region between 0.6 and 0.8 semispan. This large influence over the outboard regions of the wing was the cause of the inboard position of the panel center of pressure for upper-surface spoilers (or outboard for lower-surface spoilers) at low positive load conditions. The loss in effectiveness for the upper-surface spoilers as the angle of attack was increased beyond 6° is evident as a reduction in the load decrement beginning near the tip.

Addition of a gap through the wing behind the spoiler produced an added decrement in section normal-load parameter which extended across most of the semispan.

Figure 9 shows the wing-section center-of-pressure locations across the span of the wing at all test Mach numbers. For a swept wing the line of section centers of pressure tends to be somewhat less swept than the wing itself as shown by the basic wing data in this figure. The effect of adding the upper-surface spoilers was to exaggerate this tendency, the local center of pressure being farther rearward inboard and farther forward outboard. This effect was most noticeable at low angles of attack $(\alpha = 4^{\circ}$ and $6^{\circ})$ but rapidly decreased at higher angles for two reasons: The spoiler decrements were smaller in absolute magnitude at high angles of attack and were a smaller proportionate amount of the total normal force.

The lower-surface spoiler at low angles of attack had the opposite effect, that is, the center of pressure was more forward inboard and more rearward outboard at low angles of attack $(\alpha = 4^{\circ})$ than it was for the basic wing.

Figure 9 also shows that the section center-of-pressure locations moved ahead of the leading edge at low angles of attack for the upper-surface-spoiler configurations. This movement occurred whenever the section normal force approached zero while a finite section moment remained.

Chordwise Pressure Distributions

In the discussion which follows, selected chordwise pressure distributions for the basic wing and the three spoiler configurations are used in conjunction with unpublished tuft photographs obtained on one spoiler configuration (upper-surface spoiler - no gap) to permit the study of the effect of the spoilers on the flow over the wing.

Upper-surface spoiler without a gap.- Figure 10 shows the chordwise pressure distributions obtained at seven spanwise stations at several Mach numbers. For a Mach number of 0.60 (fig. 10(a)) and low angles of attack, the presence of the spoiler resulted in increased pressures on the upper surface ahead of the spoiler. The highest pressures were immediately ahead of the spoiler, the peak being in the corner ahead of the spoiler-fuselage juncture. This peak was sharp, but elsewhere along the spoiler face a relatively flat peak about 0.1 chord in width indicated a separated flow region. Tuft studies confirmed this result and showed that the flow on the wing surface in this region was toward the tip and parallel to the spoiler.

Behind the spoiler on the upper surface the pressures (fig. 10(a)) and tuft studies also indicated a separated flow condition. Immediately adjacent to the fuselage, the separation extended only a few percent of the chord behind the spoiler and was followed by complete recovery of the flow. Since the expansion or turn made by the air over the top of the spoiler was very abrupt, the pressures reached at this point were quite low, being about the same as those reached at the leading edge at high angles of attack. Somewhat farther out on the wing (at 0.25 semispan), the extent of the separation was greater, recovery being made at about the trailing edge. Because of the increased extent of the separated region, the air turned down toward the surface less abruptly than at the more inward locations, and the pressures reached were not as low. Outboard of 0.25 semispan, complete separation of the flow behind the spoiler was indicated by the flat pressure distributions. The pressure in this region steadily increased toward the wing tip but was always less than for the basic wing.

Apparently the flow about the spoiler was somewhat similar to that described in reference 10 for a two-dimensional supersonic case and as illustrated in figure 11 but combined with the circulatory flow patterns in the boundary layer was the outboard movement of the boundary layer in the regions ahead and behind the spoiler. The pressure distributions were somewhat similar to the two-dimensional case, and the circulation in the separated areas also appeared to be present. Ahead of the spoiler this circulation was evidenced by the spoiler face pressure distributions to be discussed later, whereas behind the spoiler the direction of the tufts indicated that the air on the wing surface was moving toward the spoiler (in addition to moving outboard). Since this circulation was combined with a spanwise movement, the flow may be described as two vortex-type motions, one ahead of the spoiler and the other behind the spoiler.

The lower-surface pressures on the wing, as shown in figure 10(a), were not changed in the inboard areas because of the presence of a spoiler on the upper surface. At about 0.30 semispan, however, the separated area behind the spoiler on the upper surface reached the trailing edge and from

this point on the semispan to the tip the pressures on the lower surface
were reduced because of the influence of the upper-surface flow. Out-
board of 0.55 semispan the reduction in lower-surface pressure extended
all the way to the leading edge.

As the angle of attack was increased, it was apparent that the
effect of the spoiler on the wing did not change appreciably until angles
of attack were reached where the flow separation on the basic wing began
to progress inboard from the tip. (See fig. 10(a).) At these angles of
attack, the spoiler effectiveness was reduced, as would be expected,
since raising the spoiler into a separated flow region where the air is
already moving parallel to the spoiler should not have any effect. (A
discussion pertaining to the flow over the basic wing may be found in
ref. 11.)

As the Mach number was increased from 0.6 at zero angle of attack
(fig. 10(a)), there was no change apparent in the way which the spoiler
affected the flow until about Mach number 1.0 (fig. 10(e)). Beginning
at this speed the lower-surface influence was less extensive, being gen-
erally confined to the area behind the 0.70-chord line. At higher angles
of attack the upper-surface influence ahead of the spoilers was also less
extensive for the higher speeds. This effect was mainly noticeable over
the inboard stations and was probably caused by the presence of a shock
wave associated with the separation point ahead of the spoiler. The
presence of this shock wave would have opposed the transmission of the
pressure increase ahead of this point except outboard where the boundary
layer was considerably thickened.

The effects of these pressure changes on the rolling moment were as
follows: The pressures on the upper surface ahead of the spoiler and on
all the lower surface changed in a direction to decrease the lift and
thus contribute to the rolling moment, whereas the pressure decreases
behind the spoiler on the upper surface were adverse. Inboard this
adverse contribution was enough to completely offset the small favorable
contribution which occurred at these stations. Thus, the span load dis-
tributions (fig. 8) show the largest normal-force decrements to have
occurred outboard (between 0.6 and 0.8 semispan) and that the contribu-
tion of that part of the wing inboard of 0.3 semispan was generally
unfavorable. These pressure changes also indicate the reasons for the
discontinuities in the panel center-of-pressure locations shown in fig-
ures 6 and 7. Zero panel lift occurred at a small positive angle of
attack and for each angle of attack the unaffected inboard sections were
positively loaded, whereas the outboard sections, where the spoiler was
most effective, were negatively loaded.

The ineffectiveness of the spoiler inboard of 0.3 semispan is not
too important since the roll moment arm is small, but the large pressure
difference across the spoiler near the fuselage is undesirable since it

contributes heavily to the drag. These adverse roll and drag effects inboard may indicate that an improvement could be obtained by removing the inboard part of the spoiler, but there is a likelihood that the region of adverse effects would then move outboard. In other words, the trouble may be associated with the inner end of the spoiler more than with the inboard area of the wing.

Effect of a gap through the wing behind an upper-surface spoiler.- Figure 12 compares chordwise pressure distributions of the basic wing with those of the spoiler-with-gap configuration throughout the Mach number and angle-of-attack range, and figure 13 compares the configurations with and without gap at a few points.

It appeared that the gap served to relieve the pressure difference between the upper- and lower-surface trailing-edge regions but its presence did not affect the extent of flow separation behind the spoiler. Evidently, the quantity of flow through the gap was too small to affect the extent of flow separation or the flow was not directed through the gap properly to decrease the extent of flow separation.

At all angles of attack and Mach numbers the gap was effective in increasing the upper-surface pressures behind the spoiler. The gap was also effective in increasing upper-surface pressures ahead of the spoiler, but this effect was very small at low angles of attack. Both of these effects increased the rolling effectiveness. On the lower surface, effects of the gap were limited to localized pressure changes.

Lower-surface spoiler with a gap.- The effect of a lower-surface spoiler ahead of a wing gap on the wing pressures is shown in figure 14. At the lower angles of attack, the lower-surface spoiler was equivalent in its effect on the flow to the upper-surface spoiler, the basic configuration being completely symmetrical about the chord plane. The appropriate part of the discussion on upper-surface spoilers therefore applies. As the angle of attack was increased, however, the lower-surface spoiler became ineffective and above about 10° produced losses in lift rather than increases. The changes leading to these losses in lift were as follows:

(1) The region of increased pressure ahead of the spoiler on the lower surface became less extensive.

(2) Behind the spoiler, the lower-surface pressures became much less than corresponding basic wing pressures and hence there was a large reduction in normal force over the trailing-edge region.

(3) When the angle of attack was reached where separation existed on the upper surface, the influence of the lower-surface spoiler in reducing upper-surface pressures vanished.

Thus, the two favorable influences noted for upper-surface spoilers both became less for the lower-surface spoiler as the angle of attack was increased, whereas the unfavorable influence became greater. This increase with angle of attack of the unfavorable trailing-edge loading did not occur with the spoiler on the upper surface.

Oppositely Deflected Spoilers

A configuration was tested in which the left wing had an upper-surface spoiler and the right wing had a lower-surface spoiler. There was no gap through the wing behind either spoiler.

Comparisons showing the effect of the lower-surface spoiler on span-load distributions for the wing having the upper-surface spoiler are presented in figure 15 for three representative Mach numbers. Study of this figure and unpublished comparisons at other Mach numbers showed that the presence of the right-wing lower-surface spoiler reduced the effectiveness of the left-wing upper-surface spoiler at an angle of attack of 0° for Mach numbers above 0.90. For all other conditions the reverse was true, although the differences appeared to be small in every case.

At about 11° there were inconsistencies in the span loadings through-out the speed range, possibly because at this angle of attack the extent of the separated flow on the wing was not always consistent. Small differences in surface conditions on the wing could probably have varied the extent of separation at this angle of attack enough to account for the differences shown.

In order to determine the magnitude of the rolling moment represented by the differences shown in the span-load plots of figure 15, the differences were plotted to a larger scale and integrated for moment about the plane of symmetry. The rolling-moment-coefficient increments so obtained in general were less than ± 0.0016, with no consistent Mach number effects discernible. Thus, the carry-over effects between wings were quite small, probably because of the inability of the spoiler to affect the inboard wing section loads to any great extent. This indication should lend credence to the use of reflection-plane test techniques for obtaining data on this type of control on swept wings.

Chordwise pressure differences have been compared at one speed only (fig. 16) to show the effect of adding the lower-surface spoiler to the opposite wing. The generally small differences were typical of all speeds.

Spoiler Loadings

Pressures at each spanwise station on the spoilers were integrated in such a manner as to obtain the pressure force coefficient normal to the spoiler chord line as indicated in the list of symbols. Figure 17 shows distributions across the wing span of these spoiler section normal-force coefficients for the three spoiler configurations weighted for spoiler height.

For upper-surface spoilers, the highest loads occurred at zero angle of attack. As the angle of attack was increased, the spoiler loads, especially near the tip, fell rather rapidly. At about an angle of attack of 11°, when flow separation existed over a considerable portion of the outboard wing area (see figs. 10 and 12), the spoilers were unloaded outboard of 0.40 semispan for all Mach numbers. This loss of spoiler load contrasted with the wing span-load distributions (fig. 8) which show that lift decrements caused by the spoilers extended much farther outboard at this angle of attack. Apparently, the inboard portions of the spoiler had an influence on the separated flow over the outboard wing areas. At higher angles of attack, where flow separation extended over more of the wing, this influence diminished.

Addition of a gap through the wing behind the spoiler resulted in a reduction of the loads on the spoiler for nearly all conditions. Figure 18, which makes a few comparisons of pressures on the upper-surface spoiler with and without gap, shows that this reduction resulted from increases in the low pressure on the back of the spoiler. These increases were probably due to the flow of high pressure air from the lower surface through the gap. The largest relief, as might be expected, was inboard where the pressures behind the spoiler were lowest.

Figure 18 shows that, at 0.25 semispan for angles of attack up to 16° and at other stations for low angles, the front face pressures on the spoiler were somewhat lower in the center of the spoiler than at the top and bottom. This type of pressure distribution is similar to that shown in reference 12 and probably indicates that there was a circulation of the separated air ahead of the spoiler as illustrated in figure 11, since such a circulation would result in higher velocities (and lower pressures) near the center than at the top or bottom.

For a lower-surface spoiler, figure 17 indicates that the loads continued to increase to the highest angles of attack of these tests. Figure 19, which compares the pressures on upper- and lower-surface spoilers, shows that the load on the lower-surface spoiler increased with angle of attack because the pressure coefficient on the front face of the spoiler remained at an approximately constant positive value through the angle-of-attack range, whereas the rear face pressure coefficient became more negative with increasing angle of attack.

Inasmuch as the spoiler pressure distributions were quite rectangular for most conditions, it would seem that a satisfactory measure of the spoiler loads could be obtained from a pair of orifices at each station located in the wing at the base of the spoiler, one orifice being immediately ahead of the spoiler and the other immediately behind. In order to test this supposition, the loads on the spoiler have been determined by this method at two speeds, Mach number 0.60 and 0.98, by using the closest available wing orifices, which were at 0.65- and 0.75-chord locations. The pressure at the 0.65-chord location was assumed to be the same as that on the front face of the spoiler and the pressure at 0.75-chord location was assumed to be the same as that on the rear face. The results are shown by the symbols in figures 17(a) and 17(f). Agreement was good for most conditions but would probably have been better if orifices closer to the spoiler had been available. This is especially true at the inboard stations where the extent of the separated flow ahead and behind the spoiler was small. It is therefore believed that a pair of properly located orifices on the wing at each station would give loads on this type spoiler as good as those obtained in the present tests with seven orifices on the spoiler at each station.

CONCLUSIONS

An investigation was conducted with 73-percent-semispan inboard-spoiler ailerons having heights of 4 percent of the local chord and located on the 70-percent-chord line of a 45° sweptback-wing—fuselage combination. Pressure data were measured on the wing and spoiler at several spanwise stations at Mach numbers from 0.60 (Reynolds number 5.1 × 10⁶) to 1.03 (Reynolds number 6.2 × 10⁶) for angles of attack that usually extended to 20° or more. The results of the investigation indicate the following conclusions:

(1) Operation of upper-surface spoilers at low and moderate angles of attack produces normal-force decrements which are largest in the 0.6 to 0.8 semispan area of the wing. Most of the normal-force decrement is associated with increases in the upper-surface pressures ahead of the spoiler due to a deceleration of the air approaching the spoiler. An additional contributing factor is a decrease in lower-surface pressures resulting from transmission of upper-surface pressure changes around the trailing edge.

(2) Rolling-moment effectiveness is reduced for upper-surface spoilers at high angles of attack because they do not have much effect on the separated flow which occurs on the basic swept wing at these angles of attack.

(3) A gap through the wing behind the spoiler is effective in increasing the rolling-moment effectiveness because it permits a relief of the pressure difference between the upper- and lower-wing surfaces.

(4) Lower-surface spoilers give reversed rolling-moment effectiveness at angles of attack higher than about $10°$ primarily because there is a large decrease in pressure behind the spoiler on the lower-wing surface at the higher angles of attack.

(5) A lower-surface spoiler has only a small effect on the rolling-moment effectiveness of a spoiler located on the upper surface of the opposite wing.

(6) Spoiler section loadings are highest at the inboard end. For upper-surface spoilers, the spoiler loading decreases rapidly with increasing angle of attack, especially outboard. For a lower-surface spoiler, however, the spoiler loading increases with angle of attack.

(7) Spoiler section load at any point along a spoiler of this type can be determined by measurement at the wing surface of the pressure drop across the spoiler.

Langley Aeronautical Laboratory,
    National Advisory Committee for Aeronautics,
        Langley Field, Va., March 8, 1954.

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TABLE I — BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.60   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.019	.485	.442	.684	.449	.467	.443
1.25	.137	-.120	-.144	-.093	-.044	-.091	-.088
2.50	.063	-.097	-.130	-.098	-.103	-.138	-.071
5.00	.002	-.093	-.112	-.098	-.069	-.071	-.096
7.50	-.028	-.105	-.094	-.091	-.102	-.090	-.111
10.00	-.038	-.116	-.129	-.107	-.110	-.101	-.123
15.00	-.069	-.124	-.138	-.125	-.114	-.124	-.104
20.00	-.081	-.132	-.146	-.134	-.126	-.125	-.122
25.00	-.101	-.146	-.156	-.139	-.127	-.126	-.112
30.00	-.119	-.154	-.164	-.147	-.133	-.134	-.112
35.00	-.118	-.159	-.169	-.150	-.138	-.141	-.114
40.00	-.130	-.169	-.169	-.154	-.140	-.138	-.106
45.00	-.145	-.170	-.169	-.155	-.136	-.137	-.103
50.00	-.159	-.174	-.169	-.150	-.135	-.130	-.095
55.00	-.137	-.169	-.155	-.149	-.128	-.125	-.083
60.00	-.149	-.164	-.145	-.100	-.115	-.104	-.059
65.00	-.157	-.146	-.120	-.099	-.099	-.082	-.048
70.00	-.117						-.040
75.00	-.106	-.115	-.085	-.074	-.061	-.046	-.017
80.00	-.139	-.083	-.055	-.044	-.038	-.017	-.010
85.00	-.114	-.054	-.005	-.020	-.000	.011	-.037
90.00	-.099	-.030	-.002	.009	.022	.039	.052
95.00	-.064	.005	.032	.017	.048	.066	.070

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.134	-.092	-.125	-.134	-.124		-.140
2.50	.069	-.069	-.098	-.098	-.091	-.074	-.109
5.00	.011	-.071	-.098	-.047	-.101	-.107	-.109
7.50	-.001	-.087	-.106	-.080	-.114	-.114	-.137
10.00	-.028	-.099	-.115	-.106	-.116	-.103	-.136
15.00	-.053	-.121	-.128	-.129	-.122	-.111	-.140
20.00	-.090	-.130	-.144	-.139	-.132	-.128	-.136
25.00	-.065	-.142	-.150	-.144	-.142	-.137	-.118
30.00	-.117	-.152	-.154	-.145	-.144	-.138	-.118
35.00	-.124	-.163	-.158	-.147	-.143	-.139	-.115
40.00	-.126	-.162	-.163	-.147	-.146	-.136	-.111
45.00	-.141	-.170	-.163	-.148	-.147	-.139	-.108
50.00	-.163	-.178	-.163	-.148	-.137	-.131	-.099
55.00	-.159	-.170	-.157	-.143	-.128	-.126	-.092
60.00	-.158	-.155	-.136	-.129	-.110	-.110	-.075
65.00	-.161	-.138	-.129	-.115	-.086	-.084	-.050
70.00	-.143						-.039
75.00	-.131	-.108	-.084	-.069	-.048	-.042	-.029
80.00	-.103	-.078	-.057	-.051	-.031	-.015	-.011
85.00	-.123	-.058	-.032	-.010	-.008	-.022	-.015
90.00	-.096	-.031	-.007	-.008	-.014	-.020	-.031
95.00	-.102	.003	.032	.045	.044	.050	.057

M = 0.60   α = 4.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.013	-.241	-.471	-.349	-.905	-.969	-.673
1.25	-.170	-1.092	-1.312	-1.238	-1.471	-1.344	-1.376
2.50	-.243	-.588	-.718	-.766	-.844	-.901	-.679
5.00	-.275	-.465	-.546	-.561	-.541	-.555	-.512
7.50	-.277	-.400	-.458	-.479	-.493	-.472	-.440
10.00	-.264	-.373	-.429	-.448	-.446	-.424	-.374
15.00	-.266	-.341	-.394	-.393	-.370	-.370	-.275
20.00	-.261	-.322	-.355	-.356	-.343	-.319	-.251
25.00	-.264	-.312	-.338	-.331	-.315	-.287	-.219
30.00	-.270	-.307	-.326	-.317	-.296	-.268	-.200
35.00	-.256	-.300	-.310	-.302	-.281	-.243	-.191
40.00	-.260	-.297	-.301	-.286	-.261	-.222	-.172
45.00	-.264	-.291	-.285	-.265	-.244	-.201	-.161
50.00	-.276	-.283	-.270	-.256	-.224	-.188	-.147
55.00	-.239	-.273	-.244	-.241	-.205	-.166	-.135
60.00	-.247	-.252	-.217	-.175	-.177	-.135	-.101
65.00	-.251	-.224	-.188	-.172	-.149	-.105	-.085
70.00	-.198						-.075
75.00	-.198	-.171	-.127	-.114	-.086	-.051	-.047
80.00	-.205	-.131	-.093	-.077	-.057	-.022	-.027
85.00	-.178	-.094	-.046	-.047	-.019	-.007	-.002
90.00	-.142	-.056	-.025	-.007	-.013	-.040	-.013
95.00	-.093	-.012	-.016	-.002	-.039	-.067	-.030

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.308	.357	.377	.362	.413	.353	.376
2.50	.272	.280	.297	.293	.331	.244	.287
5.00	.217	.201	.204	.238	.240	.187	.180
7.50	.189	.149	.163	.194	.183	.165	.101
10.00	.164	.116	.127	.152	.145	.092	.054
15.00	.120	.069	.084	.087	.103	.059	-.005
20.00	.071	.037	.041	.050	.061	.027	-.041
25.00	.075	.004	.012	.019	.033	.003	-.056
30.00	.026	-.021	-.011	-.002	.009	-.026	-.071
35.00	.003	-.040	-.033	-.017	-.006	-.041	-.075
40.00	-.004	-.053	-.048	-.031	-.019		-.080
45.00	-.027	-.070	-.055	-.046	-.035	-.055	-.083
50.00	-.052	-.083	-.070	-.051	-.040	-.064	-.082
55.00	-.061	-.081	-.069	-.052	-.045	-.065	-.082
60.00	-.066	-.077	-.058	-.052	-.039	-.056	-.073
65.00	-.075	-.075	-.058	-.044	-.022	-.043	-.055
70.00	-.068						-.049
75.00	-.067	-.063	-.039	-.028	-.007	-.014	-.043
80.00	-.047	-.035	-.023	-.007	-.005	-.002	-.035
85.00	-.069	-.027	-.000	-.007	.017	.028	-.003
90.00	-.055	-.016	.012	.016	.033	.027	-.003
95.00	-.054	.006	.038	.041	.057	.056	.017

BASIC WING

TABLE I

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.60   α = 6.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.019	-.924	-1.082	-.764	-1.570	-1.268	-1.403
1.25	-.348	-1.613	-1.234	-1.511	-1.396	-1.055	-1.440
2.50	-.413	-.942	-1.067	-1.238	-1.160	-.992	-1.358
5.00	-.415	-.692	-.908	-.967	-.893	-.863	-1.242
7.50	-.401	-.582	-.756	-.771	-.783	-.783	-1.027
10.00	-.373	-.535	-.686	-.663	-.678	-.707	-.662
15.00	-.359	-.460	-.570	-.532	-.557	-.585	-.273
20.00	-.341	-.420	-.490	-.466	-.483	-.496	-.269
25.00	-.335	-.398	-.440	-.420	-.433	-.417	-.238
30.00	-.331	-.374	-.411	-.388	-.399	-.369	-.223
35.00	-.313	-.360	-.384	-.370	-.369	-.324	-.211
40.00	-.312	-.351	-.364	-.349	-.335	-.285	-.194
45.00	-.311	-.337	-.338	-.323	-.310	-.256	-.186
50.00	-.319	-.323	-.311	-.293	-.277	-.220	-.168
55.00	-.277	-.304	-.279	-.268	-.243	-.192	-.162
60.00	-.283	-.281	-.250	-.208	-.213	-.160	-.127
65.00	-.282	-.249	-.212	-.199	-.180	-.131	-.117
70.00	-.218			-.137	-.116	-.077	-.109
75.00	-.222	-.187	-.141	-.099	-.094	-.049	-.098
80.00	-.222	-.142	-.105	-.069	-.062	-.026	-.081
85.00	-.190	-.099	-.047	-.034	-.025	-.003	-.066
90.00	-.148	-.059	-.028	-.016	-.001	.024	-.055
95.00	-.088	-.009	-.010				-.044

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.366	.459	.454	.447	.453	.410	.424
2.50	.336	.391	.396	.396	.408		.361
5.00	.310	.309	.312	.337	.330	.319	.256
7.50	.282	.254	.259	.278	.270	.262	.169
10.00	.255	.211	.220	.233	.225	.235	.108
15.00	.214	.160	.169	.171	.174	.163	.032
20.00	.163	.123	.117	.125	.121	.109	.002
25.00	.154	.087	.092	.095	.091	.071	-.041
30.00	.101	.061	.060	.070	.063	.037	-.063
35.00	.075	.034	.036	.036	.032	.008	-.070
40.00	.064	.019	.017	.017	.018	-.014	-.079
45.00	.035	.004	.002	.006	.002	-.031	-.083
50.00	.011	-.023	-.015	-.005	-.012	-.044	-.085
55.00	-.004	-.026	-.017	-.009	-.022	-.052	-.088
60.00	-.013	-.027	-.013	-.014	-.022	-.053	-.080
65.00	-.016	-.028	-.014	-.014	-.013	-.043	-.066
70.00	-.017						-.059
75.00	-.025	-.024	-.008	.001	.000	-.026	-.057
80.00	-.004	-.003	-.002	.011	.000	-.015	-.044
85.00	-.025	.001	.017	.021	.007	-.016	-.027
90.00	-.021	.009	.023	.022	.025	-.005	-.018
95.00	-.017	.021	.048	.041	.036	-.023	-.005

M = 0.60   α = 8.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.003	-1.279	-1.541	-.768	-1.252	-1.157	-1.483
1.25	-.600	-1.213	-1.282	-1.042	-.953	-.936	-1.172
2.50	-.653	-1.139	-1.221	-1.006	-.944	-.907	-1.095
5.00	-.624	-1.030	-1.137	-.956	-.906	-.862	-.982
7.50	-.594	-.905	-1.030	-.901	-.859	-.833	-.865
10.00	-.548	-.829	-.965	-.857	-.816	-.798	-.739
15.00	-.503	-.713	-.836	-.779	-.738	-.730	-.526
20.00	-.466	-.625	-.674	-.709	-.693	-.668	-.402
25.00	-.450	-.560	-.573	-.657	-.647	-.601	-.335
30.00	-.442	-.511	-.502	-.603	-.591	-.551	-.297
35.00	-.411	-.469	-.457	-.549	-.524	-.488	-.277
40.00	-.405	-.441	-.411	-.490	-.449	-.425	-.255
45.00	-.396	-.412	-.373	-.438	-.388	-.367	-.243
50.00	-.398	-.388	-.349	-.389	-.323	-.315	-.226
55.00	-.345	-.360	-.303	-.340	-.275	-.267	-.221
60.00	-.348	-.333	-.281	-.268	-.231	-.226	-.208
65.00	-.341	-.297	-.240	-.252	-.188	-.190	-.191
70.00	-.272						-.182
75.00	-.283	-.225	-.168	-.176	-.118	-.125	-.178
80.00	-.266	-.180	-.131	-.142	-.094	-.098	-.166
85.00	-.230	-.132	-.081	-.095	-.062	-.076	-.143
90.00	-.181	-.087	-.052	-.065	-.034	-.044	-.131
95.00	-.113	-.035	-.025	-.040	-.012	-.021	-.117

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.368	.484	.467	.476	.467		.425
2.50	.353	.448	.449	.439	.449	.461	.393
5.00	.369	.382	.381	.389	.388	.380	.308
7.50	.365	.327	.337	.336	.334	.322	.222
10.00	.337	.285	.289	.304	.301	.302	.166
15.00	.288	.223	.234	.232	.238	.216	.083
20.00	.233	.182	.183	.185	.190	.165	.017
25.00	.220	.146	.141	.155	.151	.124	.000
30.00	.160	.112	.117	.121	.118	.089	-.030
35.00	.129	.082	.081	.093	.090	.053	-.035
40.00	.111	.063	.060	.071	.067	.026	-.053
45.00	.080	.035	.039	.049	.043	.004	-.056
50.00	.051	.017	.026	.030	.029	-.015	-.058
55.00	.030	.009	.019	.020	.017	-.026	-.063
60.00	.017	.004	.017	.014	.008	-.033	-.061
65.00	.013	-.002	.006	.014	.013	-.026	-.052
70.00	.008						-.044
75.00	-.011	-.008	.009	.014	.013	.022	-.047
80.00	-.011	.007	.012	.017	.010	.010	-.039
85.00	-.010	.001	.022	.027	.013	.014	-.027
90.00	-.013	.011	.022	.027	.023	.008	-.036
95.00	-.009	.015	.032	.035	.023	.006	-.045

TABLE I　　　　　　　　　　　BASIC WING

PRESSURE COEFFICIENT, P, AT:

M = 0.60　α = 11.2°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.001	-2.007	-1.729	-1.385	-.820	-.550	-.552
1.25	-1.057	-1.304	-1.271	-1.227	-.794	-.536	-.459
2.50	-1.123	-1.336	-1.267	-1.239	-.794	-.525	-.461
5.00	-1.063	-1.353	-1.267	-1.246	-.791	-.510	-.463
7.50	-.949	-1.368	-1.231	-1.266	-.780	-.514	-.455
10.00	-.848	-1.428	-1.226	-1.281	-.770	-.504	-.439
15.00	-.726	-1.387	-1.192	-1.202	-.758	-.487	-.385
20.00	-.652	-1.245	-1.159	-1.111	-.737	-.465	-.336
25.00	-.632	-1.044	-1.111	-1.024	-.719	-.437	-.298
30.00	-.609	-.806	-1.048	-.936	-.705	-.422	-.271
35.00	-.563	-.597	-.973	-.864	-.689	-.401	-.257
40.00	-.532	-.467	-.888	-.798	-.672	-.382	-.230
45.00	-.496	-.396	-.787	-.739	-.661	-.369	-.215
50.00	-.484	-.371	-.698	-.675	-.641	-.354	-.210
55.00	-.419	-.348	-.591	-.623	-.618	-.341	-.200
60.00	-.409	-.334	-.520	-.534	-.588	-.325	-.195
65.00	-.392	-.300	-.432	-.499	-.548	-.325	-.193
70.00	-.321						-.155
75.00	-.351	-.232	-.292	-.407	-.492	-.315	-.187
80.00	-.297	-.180	-.235	-.364	-.466	-.306	-.191
85.00	-.255	-.129	-.157	-.316	-.423	-.301	-.189
90.00	-.192	-.087	-.109	-.268	-.376	-.282	-.187
95.00	-.126	-.025	-.066	-.247	-.338	-.276	-.189

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.380	.491	.438	.500	.469		.416
2.50	.351	.527	.493	.492	.499	.477	.398
5.00	.442	.492	.459	.472	.451	.414	.319
7.50	.488	.445	.418	.432	.399	.368	.245
10.00	.471	.412	.382	.397	.356	.345	.195
15.00	.428	.340	.325	.317	.302	.266	.129
20.00	.368	.298	.272	.275	.244	.207	.057
25.00	.334	.250	.230	.228	.205	.152	.018
30.00	.281	.217	.197	.194	.170	.117	-.005
35.00	.239	.183	.168	.160	.131	.074	-.015
40.00	.214	.154	.137	.132	.105	.043	-.035
45.00	.180	.126	.113	.102	.071	-.010	-.057
50.00	.154	.101	.087	.080	.051	-.020	-.069
55.00	.120	.087	.071	.059	.021	-.040	-.076
60.00	.099	.074	.071	.046	.008	-.055	-.076
65.00	.093	.068	.053	.040	.005	-.055	-.075
70.00	.077						-.078
75.00	.043	.055	.035	.015	-.025	-.075	-.092
80.00	.059	.055	.036	.005	-.051	-.077	-.087
85.00	.039	.051	.038	-.004	-.068	-.098	-.094
90.00	.022	.043	.029	-.026	-.057	-.121	-.109
95.00	.025	.044	.038	-.052	-.136	-.155	-.124

M = 0.60　α = 15.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.007	-2.324	-1.264	-1.045	-.666	-.468	-.371
1.25	-1.591	-1.981	-1.234	-.857	-.647	-.454	-.335
2.50	-1.809	-1.987	-1.232	-.854	-.649	-.453	-.334
5.00	-1.888	-1.993	-1.253	-.850	-.642	-.440	-.331
7.50	-1.613	-2.040	-1.239	-.847	-.638	-.443	-.330
10.00	-1.294	-2.132	-1.246	-.848	-.632	-.432	-.328
15.00	-1.064	-2.105	-1.233	-.833	-.621	-.426	-.318
20.00	-.970	-1.998	-1.234	-.822	-.608	-.415	-.309
25.00	-.807	-1.806	-1.235	-.804	-.595	-.401	-.304
30.00	-.722	-1.511	-1.228	-.798	-.584	-.404	-.298
35.00	-.663	-1.093	-1.205	-.787	-.575	-.394	-.295
40.00	-.629	-.766	-1.176	-.785	-.564	-.385	-.290
45.00	-.606	-.599	-1.127	-.774	-.557	-.379	-.289
50.00	-.586	-.544	-1.079	-.772	-.551	-.373	-.289
55.00	-.525	-.496	-1.012	-.762	-.547	-.373	-.291
60.00	-.509	-.449	-.962	-.754	-.546	-.368	-.287
65.00	-.483	-.392	-.905	-.734	-.540	-.360	-.284
70.00	-.416						-.003
75.00	-.477	-.300	-.787	-.702	-.518	-.344	-.284
80.00	-.375	-.244	-.716	-.678	-.515	-.340	-.284
85.00	-.334	-.193	-.620	-.666	-.483	-.332	-.277
90.00	-.269	-.147	-.535	-.632	-.452	-.319	-.273
95.00	-.202	-.104	-.471	-.606	-.434	-.313	-.271

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.257	.424	.378	.476	.433		.410
2.50	.275	.557	.515	.530	.500	.487	.416
5.00	.473	.575	.528	.514	.489	.445	.358
7.50	.597	.543	.504	.491	.452	.402	.290
10.00	.595	.517	.471	.461	.415	.386	.242
15.00	.558	.447	.422	.392	.354	.309	.165
20.00	.491	.403	.359	.344	.303	.246	.093
25.00	.450	.352	.319	.295	.254	.193	.054
30.00	.398	.315	.275	.257	.207	.146	.013
35.00	.352	.277	.240	.215	.167	.098	-.017
40.00	.321	.245	.207	.181	.132	.058	-.040
45.00	.280	.209	.172	.145	.091	.021	-.067
50.00	.239	.175	.141	.111	.057	-.016	-.085
55.00	.210	.152	.113	.082	.020	-.049	-.099
60.00	.184	.131	.105	.053	-.007	-.071	-.106
65.00	.164	.112	.073	.028	-.029	-.087	-.114
70.00	.145						-.129
75.00	.091	.075	.031	-.029	-.071	-.111	-.137
80.00	.102	.070	.014	-.059	-.106	-.130	-.138
85.00	-.075	.043	-.004	-.092	-.139	-.149	-.157
90.00	.044	.025	-.042	-.162	-.143	-.171	-.166
95.00	.029	-.001	-.090	-.244	-.231	-.197	-.186

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.60 α = 19.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.021	-1.259	-1.070	-1.060	-.604	-.507	-.453
1.25	-.930	-1.242	-1.037	-.801	-.599	-.498	-.433
2.50	-1.226	-1.236	-1.038	-.794	-.596	-.502	-.428
5.00	-1.383	-1.231	-1.028	-.793	-.591	-.489	-.424
7.50	-1.344	-1.226	-.996	-.790	-.591	-.493	-.415
10.00	-1.315	-1.219	-1.003	-.783	-.587	-.492	-.424
15.00	-1.277	-1.205	-.986	-.766	-.580	-.486	-.421
20.00	-1.234	-1.198	-.975	-.757	-.574	-.480	-.419
25.00	-1.192	-1.182	-.955	-.740	-.569	-.471	-.424
30.00	-1.140	-1.167	-.947	-.730	-.563	-.476	-.424
35.00	-1.081	-1.146	-.938	-.720	-.554	-.472	-.423
40.00	-1.022	-1.124	-.930	-.714	-.552	-.470	-.423
45.00	-.968	-1.095	-.915	-.707	-.551	-.468	-.421
50.00	-.923	-1.063	-.904	-.705	-.547	-.459	-.414
55.00	-.850	-1.030	-.888	-.706	-.546	-.454	-.409
60.00	-.816	-.997	-.874	-.703	-.542	-.450	-.403
65.00	-.785	-.955	-.861	-.691	-.537	-.438	-.393
70.00	-.707		-.815	-.670	-.526	-.423	-.395
75.00	-.829	-.881	-.782	-.650	-.516	-.410	-.378
80.00	-.660	-.836	-.738	-.636	-.500	-.400	-.366
85.00	-.619	-.778	-.704	-.608	-.484	-.385	-.356
90.00	-.555	-.724	-.687	-.591	-.450	-.368	-.346
95.00	-.481	-.668					-.331

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.155	.408	.331	.423	.387	.486	.358
2.50	.224	.571	.506	.518	.495	.470	.408
5.00	.512	.606	.548	.527	.507	.441	.374
7.50	.673	.589	.535	.510	.483	.426	.322
10.00	.669	.566	.511	.488	.455	.353	.273
15.00	.633	.508	.467	.430	.397	.292	.200
20.00	.565	.466	.411	.381	.345	.241	.116
25.00	.523	.414	.364	.332	.297	.186	.068
30.00	.471	.371	.322	.287	.249	.139	.021
35.00	.419	.329	.279	.243	.202	.094	.017
40.00	.387	.293	.238	.204	.164	.051	-.023
45.00	.344	.254	.204	.156	.116	.015	-.070
50.00	.305	.216	.158	.116	.083	-.022	-.093
55.00	.264	.184	.125	.080	.044	-.048	-.116
60.00	.232	.152	.093	.048	.010	-.075	-.119
65.00	.209	.127	.052	.012	-.012		-.128
70.00	.178		-.030	-.059	-.069	-.105	-.139
75.00	.118	.057	-.067	-.091	-.107	-.139	-.156
80.00	.113	.033	-.108	-.127	-.145	-.160	-.164
85.00	.076	-.021	-.180	-.195	-.153	-.185	-.181
90.00	.024	-.080	-.269	-.264	-.249	-.222	-.191
95.00	-.007	-.184					-.217

M = 0.60 α = 25.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.055	-1.024	-1.008	-.923	-.740	-.604	-.524
1.25	-.914	-1.018	-.993	-.879	-.735	-.593	-.519
2.50	-1.073	-1.015	-.982	-.879	-.733	-.599	-.516
5.00	-1.034	-1.021	-.997	-.880	-.729	-.590	-.511
7.50	-1.026	-1.023	-.981	-.875	-.725	-.591	-.512
10.00	-1.022	-1.028	-.995	-.874	-.723	-.591	-.509
15.00	-1.023	-1.023	-.993	-.862	-.710	-.587	-.506
20.00	-1.024	-1.034	-.990	-.863	-.708	-.582	-.509
25.00	-1.022	-1.035	-.985	-.847	-.705	-.571	-.512
30.00	-1.017	-1.035	-.981	-.843	-.695	-.574	-.513
35.00	-1.008	-1.032	-.976	-.833	-.690	-.571	-.515
40.00	-.999	-1.035	-.969	-.825	-.684	-.566	-.514
45.00	-.984	-1.033	-.963	-.819	-.680	-.561	-.508
50.00	-.978	-1.031	-.954	-.812	-.671	-.552	-.500
55.00	-.963	-1.026	-.942	-.803	-.665	-.543	-.492
60.00	-.962	-1.021	-.927	-.793	-.658	-.536	-.476
65.00	-.961	-1.007		-.776	-.646	-.524	-.465
70.00	-.935		-.897	-.750	-.625	-.500	-.450
75.00	-1.024	-.978	-.884	-.732	-.616	-.486	-.444
80.00	-.918	-.957	-.864	-.724	-.604	-.472	-.433
85.00	-.893	-.927	-.853	-.712	-.589	-.452	-.419
90.00	-.842	-.897	-.858	-.703	-.580	-.438	-.405
95.00	-.792	-.839					-.398

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	-.069	.314	.177	.285	.217		.239
2.50	.088	.558	.460	.468	.445	.451	.377
5.00	.501	.658	.567	.538	.523	.503	.405
7.50	.709	.668	.584	.554	.530	.500	.375
10.00	.725	.660	.583	.547	.517	.495	.339
15.00	.731	.619	.552	.510	.480	.441	.274
20.00	.683	.584	.509	.469	.436	.385	.196
25.00	.641	.534	.464	.424	.394	.335	.137
30.00	.595	.495	.423	.383	.343	.282	.081
35.00	.552	.454	.382	.339	.299	.230	.040
40.00	.514	.416	.337	.296	.254	.187	-.016
45.00	.471	.372	.297	.245	.208	.138	-.031
50.00	.425	.326	.250	.206	.159	.089	-.060
55.00	.386	.291	.211	.160	.119	.048	-.084
60.00	.346	.254	.178	.116	.078	.014	-.097
65.00	.314	.213	.117	.073	.045	-.020	-.112
70.00	.275		-.018	-.016	-.033		-.128
75.00	.209	.126	-.031	-.061	-.081	-.076	-.147
80.00	.186	.087	-.094	-.117	-.132	-.093	-.164
85.00	.132	.006	-.189	-.201	-.161	-.150	-.189
90.00	.057	-.069	-.307	-.292	-.281	-.190	-.207
95.00	-.009	-.201				-.237	-.243

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.85   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.026	.516	.458	.712	.467	.487	.454
1.25	.193	-.097	-.127	-.144	-.048	-.092	-.098
2.50	.122	-.080	-.110	-.138	-.113	-.156	-.095
5.00	.050	-.078	-.115	-.146	-.082	-.083	-.112
7.50	.011	-.093	-.120	-.141	-.120	-.107	-.145
10.00	-.004	-.107	-.138	-.140	-.135	-.123	-.178
15.00	-.041	-.121	-.155	-.164	-.135	-.152	-.162
20.00	-.066	-.138	-.172	-.171	-.154	-.156	-.176
25.00	-.093	-.157	-.188	-.179	-.167	-.163	-.163
30.00	-.115	-.170	-.201	-.190	-.170	-.174	-.154
35.00	-.116	-.187	-.210	-.191	-.177	-.178	-.148
40.00	-.136	-.202	-.215	-.194	-.176	-.181	-.139
45.00	-.158	-.212	-.221	-.193	-.175	-.176	-.130
50.00	-.187	-.224	-.216	-.190	-.171	-.163	-.116
55.00	-.161	-.221	-.198	-.181	-.162	-.149	-.100
60.00	-.188	-.217	-.184	-.126	-.143	-.122	-.070
65.00	-.206	-.196	-.155	-.127	-.118	-.099	-.056
70.00	-.157						-.036
75.00	-.149	-.163	-.106	-.091	-.072	-.043	-.013
80.00	-.185	-.125	-.075	-.059	-.043	-.012	-.015
85.00	-.174	-.088	-.021	-.032	-.003	-.020	-.041
90.00	-.145	-.055	-.009	-.003	-.027	-.049	-.061
95.00	-.103	-.008	.037	.019	.053	.078	.084

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.176	-.102	-.160	-.167	-.183		-.219
2.50	.114	-.073	-.117	-.138	-.143	-.117	-.180
5.00	.045	-.073	-.119	-.087	-.147	-.140	-.170
7.50	.026	-.093	-.132	-.120	-.161	-.150	-.204
10.00	-.005	-.104	-.146	-.141	-.163	-.147	-.215
15.00	-.038	-.130	-.165	-.181	-.156	-.156	-.216
20.00	-.083	-.141	-.181	-.183	-.173	-.172	-.191
25.00	-.055	-.159	-.195	-.191	-.179	-.177	-.169
30.00	-.126	-.178	-.204	-.193	-.183	-.182	-.160
35.00	-.134	-.196	-.212	-.195	-.185	-.187	-.151
40.00	-.140	-.206	-.223	-.199	-.188	-.184	-.143
45.00	-.166	-.223	-.223	-.200	-.190	-.177	-.132
50.00	-.204	-.233	-.221	-.193	-.179	-.166	-.118
55.00	-.200	-.223	-.205	-.182	-.168	-.148	-.102
60.00	-.208	-.213	-.185	-.161	-.146	-.121	-.078
65.00	-.219	-.201	-.168	-.139	-.116	-.095	-.052
70.00	-.197						-.038
75.00	-.185	-.161	-.114	-.087	-.060	-.039	-.014
80.00	-.153	-.121	-.085	-.053	-.041	-.004	-.005
85.00	-.175	-.094	-.049	-.023	-.011	-.033	-.028
90.00	-.152	-.055	-.018	.001	.017	.035	.049
95.00	-.150	-.010	.031	.046	.048	.066	.077

M = 0.85   α = 4.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.036	.098	-.057	.175	-.338	-.410	-.281
1.25	-.023	-.998	-1.176	-1.243	-1.284	-1.205	-1.170
2.50	-.124	-.863	-1.020	-1.186	-1.216	-1.106	-1.136
5.00	-.193	-.424	-.547	-.743	-.949	-.843	-.882
7.50	-.213	-.380	-.484	-.512	-.681	-.695	-.688
10.00	-.212	-.360	-.469	-.465	-.521	-.593	-.549
15.00	-.229	-.338	-.435	-.455	-.430	-.472	-.356
20.00	-.236	-.328	-.414	-.433	-.405	-.408	-.275
25.00	-.254	-.332	-.406	-.404	-.381	-.362	-.229
30.00	-.269	-.338	-.406	-.377	-.350	-.327	-.212
35.00	-.261	-.345	-.396	-.349	-.332	-.285	-.199
40.00	-.276	-.357	-.380	-.330	-.309	-.255	-.186
45.00	-.295	-.361	-.371	-.306	-.285	-.224	-.173
50.00	-.328	-.369	-.350	-.281	-.260	-.200	-.152
55.00	-.288	-.349	-.299	-.257	-.233	-.174	-.135
60.00	-.321	-.330	-.262	-.186	-.196	-.141	-.103
65.00	-.338	-.299	-.220	-.180	-.158	-.111	-.086
70.00	-.265						-.069
75.00	-.273	-.223	-.140	-.114	-.086	-.052	-.046
80.00	-.274	-.164	-.101	-.073	-.052	-.019	-.022
85.00	-.251	-.110	-.046	-.036	-.013	-.013	-.000
90.00	-.195	-.062	-.018	-.002	-.022	-.042	-.011
95.00	-.123	-.010	.022	.019	.049	.066	-.020

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.335	.356	.357	.342	.387		.360
2.50	.309	.283	.278	.276	.307	.328	.279
5.00	.253	.211	.194	.245	.219	.230	.179
7.50	.222	.163	.149	.187	.164	.173	.094
10.00	.196	.137	.114	.130	.123	.160	.043
15.00	.149	.078	.069	.070	.088	.084	-.043
20.00	.098	.046	.027	.040	.042	.039	-.068
25.00	.101	.015	-.002	.009	.014	.003	-.103
30.00	.044	-.013	-.030	-.012	-.009	-.030	-.108
35.00	.016	-.036	-.048	-.031	-.031	-.060	-.108
40.00	.006	-.051	-.065	-.045	-.046	-.077	-.107
45.00	-.023	-.076	-.077	-.061	-.064	-.096	-.105
50.00	-.052	-.092	-.087	-.068	-.068	-.106	-.100
55.00	-.064	-.092	-.085	-.069	-.074	-.104	-.088
60.00	-.075	-.092	-.077	-.062	-.067	-.093	-.070
65.00	-.086	-.089	-.073	-.053	-.055	-.076	-.050
70.00	-.080						-.038
75.00	-.080	-.076	-.050	-.034	-.028	-.036	-.024
80.00	-.064	-.051	-.026	-.013	-.019	-.007	-.010
85.00	-.085	-.040	-.003	-.008	-.001	-.007	-.001
90.00	-.071	-.020	.011	.022	.020	.023	.025
95.00	-.088	-.008	.044	.049	.036	.051	.044

TABLE I

BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.85   α = 6.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.025	-.207	-.347	-.035	-.710	-.822	-.718
1.25	-.158	-1.194	-1.298	-1.331	-1.465	-1.326	-1.007
2.50	-.273	-1.098	-1.115	-1.239	-1.435	-1.273	-.994
5.00	-.344	-.785	-.935	-1.073	-1.348	-1.168	-.930
7.50	-.362	-.628	-.817	-.944	-1.254	-1.093	-.883
10.00	-.345	-.563	-.756	-.868	-1.175	-1.002	-.828
15.00	-.349	-.483	-.668	-.752	-.880	-.777	-.728
20.00	-.346	-.466	-.600	-.664	-.614	-.633	-.632
25.00	-.363	-.448	-.563	-.595	-.444	-.492	-.543
30.00	-.360	-.445	-.545	-.521	-.375	-.396	-.450
35.00	-.351	-.454	-.523	-.459	-.346	-.338	-.372
40.00	-.363	-.466	-.500	-.405	-.317	-.294	-.314
45.00	-.378	-.470	-.469	-.357	-.289	-.253	-.272
50.00	-.419	-.479	-.425	-.317	-.261	-.216	-.241
55.00	-.375	-.451	-.352	-.285	-.230	-.183	-.216
60.00	-.415	-.410	-.299	-.211	-.190	-.147	-.189
65.00	-.443	-.369	-.250	-.202	-.155	-.117	-.172
70.00	-.352						-.162
75.00	-.350	-.262	-.156	-.135	-.089	-.062	-.146
80.00	-.338	-.193	-.116	-.099	-.055	-.033	-.134
85.00	-.302	-.131	-.059	-.061	-.021	-.006	-.109
90.00	-.227	-.079	-.030	-.023	-.015	-.021	-.090
95.00	-.136	-.019	-.005	-.006	.039	.043	-.070

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.381	.454	.437	.415	.453		.420
2.50	.375	.381	.368	.345	.390	.410	.354
5.00	.338	.303	.284	.308	.307	.317	.256
7.50	.311	.247	.235	.255	.250	.260	.174
10.00	.282	.217	.199	.198	.209	.219	.114
15.00	.232	.153	.145	.143	.163	.163	.015
20.00	.174	.113	.098	.105	.114	.108	-.035
25.00	.169	.079	.067	.074	.080	.068	-.082
30.00	.112	.052	.032	.051	.051	.031	-.101
35.00	.079	.023	.013	.022	.027	-.004	-.107
40.00	.065	.003	-.009	.002	-.007	-.030	-.104
45.00	.034	-.023	-.038	-.017	-.015	-.056	-.106
50.00	-.002	-.042	-.041	-.028	-.025	-.074	-.102
55.00	-.016	-.047	-.042	-.033	-.037	-.081	-.094
60.00	-.027	-.050	-.040	-.033	-.036	-.074	-.077
65.00	-.040	-.053	-.039	-.029	-.028	-.065	-.062
70.00	-.035						-.048
75.00	-.044	-.047	-.033	-.017	-.013	-.031	-.034
80.00	-.029	-.026	-.013	.000	-.011	-.008	-.021
85.00	-.050	-.021	.003	.012	.001	.033	-.110
90.00	-.045	-.009	.014	.021	.011	.016	-.005
95.00	-.053	-.010	.044	.041	.029	.036	-.012

M = 0.85   α = 8.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.022	-.494	-.599	-.228	-.960	-.834	-.957
1.25	-.272	-1.215	-1.478	-1.466	-1.277	-.749	-1.105
2.50	-.404	-1.198	-1.417	-1.427	-1.262	-.742	-1.082
5.00	-.495	-1.190	-1.371	-1.319	-1.228	-.713	-1.067
7.50	-.503	-1.139	-1.190	-1.223	-1.197	-.717	-1.095
10.00	-.502	-1.097	-1.069	-1.139	-1.172	-.699	-1.111
15.00	-.481	-.935	-.939	-1.034	-1.091	-.661	-.964
20.00	-.442	-.658	-.846	-.901	-1.023	-.628	-.463
25.00	-.454	-.423	-.781	-.818	-.967	-.584	-.231
30.00	-.457	-.490	-.726	-.718	-.897	-.559	-.236
35.00	-.434	-.526	-.685	-.610	-.830	-.523	-.250
40.00	-.429	-.545	-.640	-.518	-.753	-.487	-.243
45.00	-.423	-.548	-.566	-.445	-.673	-.449	-.243
50.00	-.488	-.571	-.466	-.384	-.585	-.414	-.232
55.00	-.467	-.567	-.363	-.333	-.498	-.384	-.223
60.00	-.527	-.511	-.313	-.247	-.402	-.356	-.207
65.00	-.560	-.428	-.259	-.235	-.301	-.319	-.204
70.00	-.460						-.200
75.00	-.452	-.262	-.167	-.161	-.158	-.277	-.191
80.00	-.410	-.189	-.126	-.127	-.113	-.250	-.186
85.00	-.337	-.126	-.074	-.091	-.065	-.231	-.170
90.00	-.238	-.074	-.047	-.050	-.024	-.199	-.161
95.00	-.142	-.015	-.018	-.023	-.002	-.181	-.152

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.403	.520	.484	.460	.478		.427
2.50	.427	.462	.431	.411	.440	.448	.378
5.00	.419	.386	.357	.368	.369	.365	.289
7.50	.403	.327	.306	.318	.314	.306	.210
10.00	.369	.292	.270	.268	.268	.287	.153
15.00	.317	.226	.216	.216	.221	.205	.062
20.00	.256	.185	.164	.171	.169	.146	.011
25.00	.245	.146	.125	.141	.132	.100	-.058
30.00	.185	.114	.097	.109	.099	.064	-.097
35.00	.143	.084	.068	.077	.073	.023	-.103
40.00	.128	.061	.046	.057	.047	-.006	-.105
45.00	.092	.034	.030	.027	.021	-.038	-.113
50.00	.062	.013	.006	.021	.005	-.062	-.114
55.00	.039	-.003	.001	.011	-.012	-.075	-.109
60.00	.021	-.003	.000	.001	-.015	-.079	-.097
65.00	.014	-.008	-.008	.001	-.012	-.075	-.084
70.00	.009						-.079
75.00	-.009	-.012	-.006	.005	-.011	-.060	-.076
80.00	.011	.004	.004	.013	-.014	-.049	-.064
85.00	-.010	.008	.018	.024	-.008	-.055	-.062
90.00	-.014	.009	.018	.024	-.001	-.069	-.065
95.00	-.016	.020	.037	.035	.012	-.087	-.078

TABLE I   BASIC WING

	PRESSURE COEFFICIENT, P, AT:						
PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 11.3°							
UPPER SURFACE							
.00	-.007	-.887	-1.015	-.660	-.873	-.514	-.515
1.25	-.451	-1.479	-1.384	-1.146	-.787	-.483	-.421
2.50	-.607	-1.464	-1.267	-1.158	-.783	-.481	-.422
5.00	-.749	-1.499	-1.246	-1.136	-.764	-.465	-.430
7.50	-.767	-1.492	-1.203	-1.134	-.755	-.468	-.430
10.00	-.749	-1.461	-1.193	-1.134	-.747	-.454	-.427
15.00	-.735	-1.378	-1.163	-1.093	-.731	-.441	-.397
20.00	-.670	-1.330	-1.111	-1.050	-.711	-.420	-.356
25.00	-.648	-1.268	-1.063	-1.007	-.687	-.415	-.323
30.00	-.627	-.970	-1.017	-.962	-.675	-.405	-.302
35.00	-.601	-.546	-.967	-.921	-.660	-.391	-.287
40.00	-.588	-.566	-.912	-.876	-.647	-.384	-.276
45.00	-.588	-.596	-.850	-.829	-.630	-.377	-.274
50.00	-.624	-.620	-.783	-.785	-.614	-.372	-.270
55.00	-.568	-.619	-.702	-.737	-.598	-.367	-.269
60.00	-.616	-.577	-.637	-.701	-.582	-.367	-.266
65.00	-.656	-.490	-.581	-.642	-.566		-.274
70.00	-.579						-.272
75.00	-.579	-.307	-.446	-.535	-.520	-.360	-.269
80.00	-.498	-.240	-.388	-.495	-.505	-.352	-.265
85.00	-.379	-.173	-.310	-.450	-.478	-.345	-.268
90.00	-.273	-.111	-.243	-.403	-.444	-.333	-.261
95.00	-.186	-.054	-.190	-.362	-.418	-.323	-.256
LOWER SURFACE							
1.25	.383	.576	.511	.515	.489	.482	.437
2.50	.443	.556	.507	.490	.491	.412	.412
5.00	.519	.501	.456	.464	.441	.362	.331
7.50	.541	.448	.413	.418	.389	.299	.255
10.00	.509	.411	.376	.373	.351	.260	.202
15.00	.454	.343	.323	.308	.297	.198	.113
20.00	.383	.298	.269	.263	.243	.147	.009
25.00	.356	.256	.222	.225	.196	.099	-.015
30.00	.294	.220	.192	.190	.161	.053	-.059
35.00	.250	.182	.159	.153	.122	.012	-.093
40.00	.228	.156	.130	.125	.090	-.030	-.114
45.00	.188	.124	.104	.094	.054	-.068	-.122
50.00	.155	.096	.079	.067	.027	-.098	-.136
55.00	.124	.079	.064	.048	.001	-.121	-.144
60.00	.099	.065	.056	.033	-.021	-.141	-.146
65.00	.089	.052	.039	.016	-.037		-.156
70.00	.077						-.159
75.00	.027	.034	.022	-.011	-.069	-.162	-.160
80.00	.049	.039	.023	-.021	-.100	-.188	-.177
85.00	.030	.011	.023	-.036	-.125	-.197	-.183
90.00	.018	.018	.006	-.073	-.172	-.212	-.184
95.00	.017	.008	-.001	-.107	-.217	-.229	-.199
M = 0.85 α = 15.8°							
UPPER SURFACE							
.00	-.007	-1.294	-1.090	-.950	-.666	-.466	-.419
1.25	-.644	-1.561	-1.026	-.791	-.654	-.456	-.398
2.50	-.865	-1.529	-1.006	-.784	-.652	-.456	-.399
5.00	-1.052	-1.505	-1.047	-.784	-.644	-.448	-.409
7.50	-1.071	-1.482	-1.035	-.788	-.642	-.452	-.407
10.00	-1.055	-1.454	-1.040	-.791	-.639	-.448	-.394
15.00	-1.024	-1.364	-1.023	-.767	-.632	-.441	-.396
20.00	-.931	-1.318	-.991	-.753	-.620	-.435	-.395
25.00	-.832	-1.269	-.959	-.743	-.605	-.417	-.389
30.00	-.716	-1.224	-.944	-.738	-.598	-.423	-.392
35.00	-.628	-1.171	-.928	-.728	-.587	-.419	-.390
40.00	-.637	-1.106	-.909	-.715	-.578	-.414	-.387
45.00	-.676	-1.031	-.894	-.705	-.569	-.412	-.385
50.00	-.709	-.967	-.879	-.697	-.560	-.411	-.385
55.00	-.643	-.897	-.855	-.687	-.550	-.406	-.381
60.00	-.676	-.836	-.838	-.684	-.544	-.403	-.377
65.00	-.699	-.790	-.841	-.680	-.546	-.412	-.388
70.00	-.623						-.001
75.00	-.663	-.663	-.783	-.645	-.512	-.397	-.367
80.00	-.601	-.607	-.763	-.629	-.503	-.390	-.359
85.00	-.545	-.537	-.731	-.611	-.488	-.386	-.358
90.00	-.449	-.466	-.707	-.582	-.475	-.382	-.347
95.00	-.360	-.403	-.696	-.569	-.462	-.377	-.336
LOWER SURFACE							
1.25	.340	.579	.489	.527	.459	.495	.413
2.50	.438	.619	.550	.520	.502	.449	.415
5.00	.607	.594	.528	.509	.476	.404	.355
7.50	.684	.554	.496	.474	.436	.351	.287
10.00	.654	.519	.466	.437	.398	.302	.239
15.00	.589	.453	.413	.374	.347	.244	.143
20.00	.510	.405	.358	.326	.289	.190	.067
25.00	.475	.361	.314	.278	.242	.135	.003
30.00	.410	.318	.270	.240	.196	.083	-.068
35.00	.361	.275	.238	.196	.156	.035	-.121
40.00	.333	.245	.196	.156	.112	.014	-.146
45.00	.288	.204	.165	.118	.068	-.014	-.165
50.00	.245	.174	.128	.080	.029	-.062	-.185
55.00	.214	.146	.097	.045	.007	-.104	-.201
60.00	.186	.122	.076	.013	-.038	-.135	-.205
65.00	.163	.094	.036	-.025	-.073	-.171	-.232
70.00	.144					-.213	-.230
75.00	.080	-.055	-.019	-.082	-.114	-.240	-.263
80.00	.090	-.043	-.045	-.109	-.154	-.266	-.259
85.00	.059	-.010	-.079	-.145	-.185	-.281	-.259
90.00	.022	-.040	-.146	-.201	-.232	-.288	-.277
95.00	.003	-.100	-.217	-.258	-.287		

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 19.6°							
UPPER SURFACE							
.00	-.030	-1.020	-.895	-.841	-.666	-.567	-.492
1.25	-.648	-1.010	-.870	-.737	-.662	-.552	-.477
2.50	-.818	-1.008	-.851	-.734	-.663	-.558	-.476
5.00	-1.057	-.997	-.863	-.742	-.652	-.548	-.481
7.50	-1.039	-.989	-.844	-.752	-.649	-.556	-.474
10.00	-1.027	-.984	-.846	-.742	-.648	-.556	-.467
15.00	-1.023	-.963	-.844	-.726	-.643	-.549	-.461
20.00	-.987	-.954	-.835	-.720	-.639	-.541	-.462
25.00	-.947	-.942	-.827	-.717	-.628	-.523	-.459
30.00	-.904	-.936	-.823	-.715	-.624	-.530	-.466
35.00	-.858	-.925	-.818	-.709	-.618	-.528	-.469
40.00	-.817	-.910	-.809	-.701	-.612	-.520	-.468
45.00	-.785	-.895	-.805	-.696	-.608	-.519	-.467
50.00	-.781	-.886	-.797	-.690	-.603	-.519	-.466
55.00	-.729	-.873	-.786	-.686	-.595	-.513	-.460
60.00	-.738	-.857	-.778	-.683	-.596	-.507	-.453
65.00	-.734	-.858	-.783	-.679	-.599	-.508	-.460
70.00	-.686						-.440
75.00	-.772	-.818	-.751	-.661	-.579	-.488	-.435
80.00	-.686	-.804	-.735	-.655	-.572	-.477	-.421
85.00	-.672	-.784	-.722	-.646	-.563	-.465	-.417
90.00	-.641	-.763	-.703	-.631	-.552	-.453	-.402
95.00	-.584	-.740	-.689	-.621	-.538	-.436	-.386
LOWER SURFACE							
1.25	.217	.573	.459	.509	.421		.374
2.50	.402	.661	.573	.541	.506	.492	.421
5.00	.661	.668	.583	.542	.512	.475	.394
7.50	.774	.640	.563	.522	.486	.446	.337
10.00	.754	.612	.539	.500	.455	.396	.297
15.00	.696	.554	.492	.444	.409	.361	.209
20.00	.621	.505	.437	.398	.353	.305	.122
25.00	.580	.460	.393	.349	.306	.248	.050
30.00	.520	.415	.352	.307	.260	.195	-.018
35.00	.469	.376	.308	.266	.218	.138	-.074
40.00	.437	.338	.271	.219	.173	.090	-.105
45.00	.392	.299	.231	.179	.125	.039	-.142
50.00	.350	.260	.191	.136	.087	.014	-.169
55.00	.311	.227	.152	.097	.045	-.062	-.194
60.00	.276	.196	.126	.061	.011	-.100	-.204
65.00	.255	.165	.078	.024	-.025	-.141	-.231
70.00	.222						-.242
75.00	.154	-.105	-.001	-.048	-.089	-.198	-.242
80.00	.151	.076	-.038	-.082	-.134	-.234	-.272
85.00	.111	.010	-.085	-.122	-.172	-.267	-.285
90.00	.055	-.053	-.155	-.184	-.239	-.296	-.285
95.00	.020	-.163	-.230	-.254	-.297	-.319	-.306
M = 0.85 α = 26.0°							
UPPER SURFACE							
.00	-.115	-.881	-.880	-.811	-.780	-.697	-.600
1.25	-.554	-.885	-.879	-.796	-.791	-.694	-.587
2.50	-.921	-.880	-.865	-.798	-.791	-.709	-.587
5.00	-.897	-.884	-.880	-.803	-.788	-.706	-.591
7.50	-.889	-.886	-.868	-.807	-.791	-.732	-.586
10.00	-.885	-.887	-.872	-.819	-.790	-.750	-.577
15.00	-.887	-.881	-.875	-.812	-.813	-.711	-.573
20.00	-.882	-.887	-.873	-.811	-.824	-.682	-.572
25.00	-.878	-.886	-.877	-.815	-.799	-.662	-.569
30.00	-.880	-.888	-.887	-.820	-.786	-.671	-.575
35.00	-.873	-.889	-.886	-.817	-.776	-.669	-.578
40.00	-.865	-.889	-.879	-.816	-.769	-.662	-.578
45.00	-.859	-.889	-.873	-.813	-.769	-.657	-.577
50.00	-.853	-.889	-.870	-.813	-.765	-.655	-.573
55.00	-.839	-.887	-.865	-.809	-.759	-.649	-.565
60.00	-.837	-.885	-.861	-.802	-.753	-.639	-.552
65.00	-.836	-.890	-.868	-.804	-.755	-.644	-.556
70.00	-.805						-.530
75.00	-.898	-.871	-.848	-.783	-.726	-.611	-.515
80.00	-.811	-.867	-.840	-.776	-.718	-.594	-.501
85.00	-.804	-.857	-.830	-.767	-.703	-.577	-.494
90.00	-.783	-.843	-.826	-.758	-.693	-.562	-.476
95.00	-.736	-.825	-.823	-.753	-.678	-.541	-.465
LOWER SURFACE							
1.25	.046	.511	.358	.420	.295		.256
2.50	.292	.686	.567	.530	.475	.460	.395
5.00	.661	.749	.640	.577	.541	.498	.420
7.50	.842	.743	.639	.576	.543	.498	.395
10.00	.840	.732	.632	.571	.528	.471	.366
15.00	.816	.687	.600	.543	.499	.444	.301
20.00	.758	.649	.557	.505	.454	.396	.209
25.00	.717	.605	.518	.462	.413	.347	.144
30.00	.668	.565	.478	.422	.368	.294	.070
35.00	.619	.526	.441	.382	.326	.242	.009
40.00	.583	.488	.398	.334	.285	.193	-.042
45.00	.541	.443	.356	.294	.238	.138	-.079
50.00	.500	.404	.316	.251	.193	.083	-.118
55.00	.460	.369	.277	.208	.149	.029	-.151
60.00	.423	.335	.240	.167	.107	-.015	-.173
65.00	.399	.298	.192	.125	.070	-.067	-.208
70.00	.352						-.237
75.00	.292	.222	.096	.041	-.005	-.143	-.246
80.00	.259	.185	.050	-.001	-.064	-.160	-.279
85.00	.210	.102	-.001	-.051	-.115	-.227	-.300
90.00	.136	.037	-.081	-.129	-.145	-.289	-.317
95.00	.076	-.092	-.173	-.214	-.274	-.341	-.349

TABLE I　　　　　　　BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.90　α = 0.0° — UPPER SURFACE							
.00	.030	.530	.459	.720	.464	.487	.453
1.25	-.216	-.078	-.112	-.111	-.051	-.079	-.098
2.50	-.145	-.064	-.097	-.114	-.122	-.161	-.099
5.00	-.072	-.066	-.103	-.121	-.087	-.088	-.117
7.50	-.032	-.079	-.112	-.121	-.132	-.113	-.155
10.00	-.014	-.094	-.131	-.128	-.148	-.131	-.197
15.00	-.027	-.110	-.150	-.172	-.149	-.163	-.213
20.00	-.050	-.131	-.170	-.174	-.168	-.166	-.209
25.00	-.081	-.152	-.191	-.189	-.181	-.176	-.174
30.00	-.104	-.172	-.209	-.193	-.183	-.189	-.165
35.00	-.108	-.190	-.217	-.197	-.191	-.198	-.155
40.00	-.130	-.212	-.231	-.197	-.189	-.207	-.143
45.00	-.158	-.227	-.242	-.192	-.186	-.197	-.134
50.00	-.190	-.247	-.247	-.185	-.184	-.178	-.116
55.00	-.166	-.241	-.223	-.174	-.176	-.156	-.102
60.00	-.204	-.242	-.197	-.118	-.154	-.126	-.067
65.00	-.229	-.231	-.155	-.122	-.130	-.098	-.052
70.00	-.177				-.081	-.041	-.029
75.00	-.175	-.196	-.104	-.084	-.047	-.010	-.003
80.00	-.220	-.146	-.069	-.053	-.007	-.025	-.024
85.00	-.214	-.098	-.016	-.017	-.027	-.056	-.050
90.00	-.178	-.059	.000	-.016	-.054	-.088	-.071
95.00	-.128	-.012	.034	.034	.052	.088	-.088
M = 0.90　α = 0.0° — LOWER SURFACE							
1.25	-.194	-.093	-.153	-.172	-.208	-.137	-.240
2.50	-.131	-.063	-.108	-.141	-.170	-.154	-.202
5.00	-.061	-.062	-.112	-.082	-.167	-.163	-.178
7.50	-.039	-.084	-.125	-.126	-.182	-.161	-.220
10.00	-.009	-.096	-.143	-.144	-.187	-.171	-.240
15.00	-.027	-.127	-.162	-.191	-.176	-.188	-.276
20.00	-.073	-.138	-.183	-.197	-.189	-.195	-.244
25.00	-.047	-.162	-.200	-.200	-.193	-.203	-.183
30.00	-.118	-.181	-.219	-.205	-.196	-.215	-.167
35.00	-.130	-.202	-.227	-.209	-.199	-.215	-.153
40.00	-.139	-.217	-.241	-.209	-.201	-.203	-.148
45.00	-.168	-.245	-.249	-.206	-.206	-.179	-.137
50.00	-.201	-.260	-.252	-.197	-.193	-.157	-.122
55.00	-.215	-.257	-.230	-.182	-.184	-.127	-.103
60.00	-.229	-.246	-.191	-.156	-.158	-.096	-.073
65.00	-.244	-.238	-.166	-.131	-.126	-.036	-.046
70.00	-.228				-.068	-.003	-.029
75.00	-.219	-.190	-.112	-.082	-.044	-.034	-.007
80.00	-.190	-.139	-.079	-.046	-.016	-.046	-.015
85.00	-.211	-.104	-.039	-.013	-.010	-.075	-.031
90.00	-.171	-.066	-.005	-.015	-.052		-.060
95.00	-.177	-.013	.041	.058			.084
M = 0.90　α = 4.0° — UPPER SURFACE							
.00	.026	.165	.038	.280	-.215	-.309	-.217
1.25	-.012	-.921	-1.015	-1.081	-1.121	-1.131	-1.193
2.50	-.090	-.820	-.927	-1.103	-1.135	-1.199	-1.167
5.00	-.165	-.395	-.558	-.966	-1.041	-1.070	-.987
7.50	-.192	-.361	-.474	-.542	-.975	-1.030	-.943
10.00	-.194	-.350	-.450	-.438	-.833	-.986	-.889
15.00	-.217	-.328	-.427	-.473	-.482	-.680	-.484
20.00	-.225	-.325	-.418	-.466	-.507	-.347	-.291
25.00	-.249	-.335	-.425	-.482	-.529	-.286	-.157
30.00	-.262	-.341	-.440	-.492	-.487	-.286	-.147
35.00	-.260	-.356	-.443	-.506	-.386	-.276	-.165
40.00	-.271	-.379	-.459	-.522	-.286	-.247	-.169
45.00	-.298	-.389	-.479	-.489	-.256	-.204	-.174
50.00	-.341	-.416	-.484	-.382	-.251	-.171	-.155
55.00	-.300	-.430	-.475	-.253	-.230	-.155	-.139
60.00	-.346	-.421	-.462	-.156	-.195	-.128	-.108
65.00	-.392	-.402	-.329	-.155	-.156	-.104	-.091
70.00	-.328				-.082	-.047	-.078
75.00	-.340	-.413	-.135	-.104	-.046	-.015	-.053
80.00	-.380	-.301	-.094	-.068	-.007	-.019	-.030
85.00	-.405	-.169	-.040	-.027	-.028	-.045	-.006
90.00	-.349	-.089	-.011	-.008	-.052	-.070	-.006
95.00	-.225	-.028	.022	.021			-.025
M = 0.90　α = 4.0° — LOWER SURFACE							
1.25	.335	.343	.333	.310	.361	.318	.354
2.50	.308	.270	.258	.241	.280	.217	.268
5.00	.254	.199	.179	.221	.193	.160	.175
7.50	.222	.151	.131	.165	.140	.122	.090
10.00	.194	.127	.099	.108	.103	.077	.032
15.00	.149	.068	.051	.048	.071	.029	-.080
20.00	.093	.031	.023	.015	.023	.007	-.127
25.00	.097	.002	-.011	-.012	.003	-.039	-.162
30.00	.037	-.029	-.050	-.029	-.027	-.074	-.150
35.00	.007	-.053	-.068	-.051	-.045	-.098	-.128
40.00	-.004	-.071	-.089	-.069	-.061	-.122	-.124
45.00	-.036	-.102	-.104	-.084	-.080	-.134	-.117
50.00	-.072	-.118	-.115	-.085	-.085	-.128	-.110
55.00	-.084	-.120	-.111	-.086	-.089	-.108	-.096
60.00	-.098	-.120	-.101	-.080	-.083	-.089	-.079
65.00	-.117	-.122	-.096	-.070	-.070		-.058
70.00	-.106				-.040	-.038	-.046
75.00	-.110	-.107	-.073	-.043	-.030	-.008	-.025
80.00	-.093	-.083	-.045	-.023	-.009	-.029	-.009
85.00	-.115	-.072	-.019	-.003	-.006	-.029	-.010
90.00	-.104	-.047	-.002	-.019	.042	-.059	-.027
95.00	-.128	-.015	.034	.047			-.046

TABLE I   BASIC WING

M = 0.90   α = 6.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.025	-.072	-.197	-.086	-.511	-.627	-.581
1.25	-.087	-1.019	-1.257	-1.277	-1.311	-1.297	-1.138
2.50	-.199	-1.008	-1.204	-1.313	-1.317	-1.363	-1.128
5.00	-.284	-.735	-1.096	-1.235	-1.255	-1.260	-1.070
7.50	-.308	-.622	-.961	-1.121	-1.199	-1.238	-1.018
10.00	-.305	-.566	-.771	-1.058	-1.157	-1.202	-.957
15.00	-.313	-.473	-.535	-.885	-1.052	-1.127	-.832
20.00	-.305	-.435	-.491	-.545	-1.027	-1.058	-.728
25.00	-.335	-.421	-.497	-.541	-.814	-.848	-.646
30.00	-.347	-.416	-.516	-.558	-.622	-.588	-.540
35.00	-.335	-.426	-.522	-.575	-.596	-.475	-.459
40.00	-.338	-.442	-.536	-.597	-.563	-.359	-.390
45.00	-.359	-.450	-.555	-.616	-.386	-.252	-.336
50.00	-.400	-.474	-.565	-.623	-.217	-.189	-.288
55.00	-.356	-.492	-.565	-.537	-.153	-.145	-.251
60.00	-.404	-.489	-.565	-.258	-.119	-.111	-.224
65.00	-.446	-.452	-.516	-.172	-.095	-.075	-.196
70.00	-.386						-.187
75.00	-.393	-.502	-.219	-.079	-.047	-.026	-.167
80.00	-.436	-.455	-.128	-.045	-.024	.001	-.158
85.00	-.472	-.297	-.057	-.011	-.008	.026	-.129
90.00	-.453	-.150	-.018	.021	.037	.050	-.114
95.00	-.339	-.058	.017	.031	.056	.071	-.091

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.387	.448	.426	.399	.435		.407
2.50	.385	.378	.350	.317	.367	.389	.339
5.00	.344	.298	.270	.292	.284	.293	.243
7.50	.315	.241	.219	.236	.228	.239	.165
10.00	.284	.213	.188	.172	.186	.201	.107
15.00	.234	.149	.132	.122	.147	.146	.001
20.00	.179	.110	.085	.082	.098	.091	-.069
25.00	.173	.073	.051	.052	.065	.053	-.132
30.00	.113	.042	.022	.030	.038	.017	-.152
35.00	.076	.014	-.006	.001	.015	-.021	-.142
40.00	.065	-.005	-.027	-.015	-.004	-.050	-.134
45.00	.030	-.037	-.046	-.035	-.026	-.080	-.122
50.00	.005	-.057	-.061	-.046	-.035	-.100	-.109
55.00	-.024	-.063	-.061	-.049	-.046	-.106	-.097
60.00	-.036	-.068	-.061	-.049	-.043	-.099	-.077
65.00	-.051	-.073	-.062	-.040	-.033	-.083	-.056
70.00	-.048						-.049
75.00	-.057	-.071	-.047	-.022	-.013	-.034	-.026
80.00	-.046	-.053	-.027	-.003	-.008	-.006	-.011
85.00	-.070	-.049	-.006	.011	-.007	-.028	.000
90.00	-.071	-.040	.005	.025	.021	.032	-.014
95.00	-.097	-.021	.037	.048	.046	.062	-.016

M = 0.90   α = 7.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.018	-.330	-.413	-.095	-.738	-.876	-.750
1.25	-.188	-1.139	-1.419	-1.411	-1.403	-1.079	-.798
2.50	-.317	-1.135	-1.351	-1.433	-1.401	-1.098	-.797
5.00	-.415	-1.119	-1.336	-1.380	-1.355	-.989	-.802
7.50	-.442	-1.031	-1.256	-1.322	-1.315	-.997	-.782
10.00	-.433	-.967	-1.175	-1.275	-1.287	-.975	-.752
15.00	-.436	-.795	-.881	-1.225	-1.232	-.925	-.713
20.00	-.410	-.600	-.689	-1.155	-1.190	-.827	-.644
25.00	-.423	-.478	-.623	-.939	-1.133	-.764	-.527
30.00	-.422	-.468	-.609	-.786	-1.021	-.718	-.474
35.00	-.409	-.483	-.609	-.719	-.864	-.663	-.450
40.00	-.410	-.504	-.615	-.686	-.743	-.612	-.421
45.00	-.418	-.516	-.627	-.671	-.701	-.565	-.395
50.00	-.462	-.538	-.636	-.676	-.623	-.525	-.375
55.00	-.420	-.557	-.634	-.607	-.485	-.494	-.358
60.00	-.474	-.564	-.642	-.305	-.339	-.460	-.338
65.00	-.523	-.519	-.592	-.195	-.245	-.418	-.327
70.00	-.464						-.321
75.00	-.459	-.578	-.286	-.075	-.162	-.356	-.307
80.00	-.502	-.546	-.179	-.044	-.124	-.317	-.296
85.00	-.533	-.412	-.099	-.024	-.075	-.279	-.284
90.00	-.523	-.199	-.052	-.002	-.032	-.231	-.272
95.00	-.420	-.092	-.013	.013	-.004	-.196	-.260

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.413	.517	.489	.449	.472		.432
2.50	.444	.452	.427	.386	.422	.435	.380
5.00	.428	.378	.351	.356	.348	.353	.294
7.50	.407	.322	.302	.296	.292	.295	.213
10.00	.376	.288	.265	.242	.248	.247	.154
15.00	.323	.221	.210	.193	.202	.200	.061
20.00	.260	.176	.158	.153	.154	.147	.016
25.00	.247	.137	.125	.118	.116	.100	-.080
30.00	.185	.105	.088	.086	.087	.062	-.120
35.00	.144	.075	.059	.060	.062	.022	-.134
40.00	.127	.053	.035	.035	.037	-.011	-.138
45.00	.092	.022	.013	.016	.014	-.044	-.136
50.00	.058	-.003	-.008	-.003	-.002	-.075	-.127
55.00	.034	-.014	-.018	-.012	-.018	-.089	-.118
60.00	.014	-.023	-.021	-.014	-.021	-.092	-.105
65.00	.004	-.035	-.025	-.012	-.017	-.088	-.092
70.00	-.002						-.089
75.00	-.021	-.039	-.022	-.006	-.010	-.060	-.083
80.00	-.007	-.034	-.007	-.004	-.011	-.040	-.076
85.00	-.031	-.036	-.004	-.017	-.002	-.039	-.084
90.00	-.043	-.038	-.010	-.020	-.005	-.051	-.091
95.00	-.065	-.030	.029	.038	.019	-.066	-.110

TABLE I   BASIC WING

| PERCENT CHORD | PRESSURE COEFFICIENT, P, AT: | | | | | | |
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.90   α = 11.4°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.005	-.713	-.800	-.436	-.568	-.361	-.478
1.25	-.346	-1.358	-1.426	-1.073	.523	-.529	-.400
2.50	-.495	-1.344	-1.349	-1.073	.503	-.446	-.402
5.00	-.636	-1.380	-1.358	-1.085	.463	-.425	-.417
7.50	-.664	-1.348	-1.282	-1.115	.403	-.373	-.407
10.00	-.657	-1.303	-1.249	-1.129	.367	-.329	-.385
15.00	-.658	-1.208	-1.189	-1.102	.299	-.255	-.370
20.00	-.604	-1.143	-1.131	-1.064	.246	-.208	-.353
25.00	-.592	-1.076	-1.087	-1.048	.203	-.157	-.327
30.00	-.576	-.934	-1.047	-1.019	.165	-.105	-.318
35.00	-.556	-.683	-1.009	-.981	.126	-.060	-.311
40.00	-.550	-.574	-.971	-.934	.089	-.012	-.307
45.00	-.547	-.595	-.923	-.887	.059	-.034	-.309
50.00	-.578	-.631	-.879	-.837	.025	-.076	-.312
55.00	-.525	-.651	-.826	-.788	.009	-.116	-.312
60.00	-.571	-.661	-.781	-.756	.036	-.141	-.314
65.00	-.618	-.631	-.712	-.708	.062	-.167	-.332
70.00	-.575					.193	-.016
75.00	-.595	-.651	-.492	-.619	.114	.201	-.322
80.00	-.623	-.593	-.416	-.581	.138	.209	-.319
85.00	-.643	-.383	-.338	-.546	.154	.231	-.322
90.00	-.587	-.244	-.280	-.497	.187	.251	-.315
95.00	-.433	-.159	-.237	-.467	.243		-.311

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.388	.587	.522	.508	-.824		.439
2.50	.474	.558	.508	.473	-.811	-.489	.414
5.00	.540	.498	.448	.445	-.775	-.506	.334
7.50	.557	.444	.404	.396	-.765	-.506	.255
10.00	.524	.410	.368	.353	-.758	-.501	.203
15.00	.464	.339	.313	.288	-.746	-.487	.109
20.00	.388	.293	.257	.244	-.736	-.467	.009
25.00	.363	.250	.216	.200	-.702	-.447	-.032
30.00	.297	.210	.179	.168	-.702	-.445	-.087
35.00	.251	.176	.146	.132	-.680	-.444	-.129
40.00	.229	.148	.115	.099	-.663	-.437	-.152
45.00	.188	.113	.088	.069	-.647	-.426	-.155
50.00	.150	.082	.059	.043	-.628	-.426	-.172
55.00	.120	.063	.040	.022	-.614	-.423	-.185
60.00	.096	.047	.029	.005	-.598	-.423	-.187
65.00	.080	.029	.006	-.018	-.584	-.442	-.209
70.00	.068				-.522	-.436	-.213
75.00	.015	.009	-.017	-.041	-.513	-.426	-.211
80.00	.037	.008	-.018	-.051	-.497	-.426	-.244
85.00	.016	-.018	-.025	-.071	-.488	-.407	-.243
90.00	.001	-.038	-.044	-.110	-.458	-.375	-.242
95.00	-.008	-.053	-.056	-.155			-.255

M = 0.90   α = 15.6°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.000	-1.065	-1.027	-.865	-.684	-.517	-.460
1.25	-.491	-1.468	-.951	-.773	-.670	-.505	-.436
2.50	-.700	-1.443	-.925	-.771	-.667	-.509	-.435
5.00	-.880	-1.452	-.954	-.770	-.660	-.496	-.445
7.50	-.907	-1.457	-.946	-.782	-.656	-.499	-.445
10.00	-.896	-1.439	-.954	-.792	-.655	-.497	-.430
15.00	-.882	-1.352	-.962	-.780	-.650	-.492	-.428
20.00	-.812	-1.291	-.948	-.769	-.640	-.482	-.428
25.00	-.764	-1.206	-.932	-.758	-.629	-.468	-.420
30.00	-.718	-1.154	-.923	-.751	-.622	-.468	-.421
35.00	-.670	-1.089	-.908	-.742	-.612	-.466	-.420
40.00	-.622	-1.008	-.893	-.730	-.604	-.458	-.418
45.00	-.566	-.903	-.881	-.718	-.594	-.454	-.416
50.00	-.553	-.835	-.867	-.709	-.587	-.453	-.415
55.00	-.537	-.795	-.846	-.699	-.578	-.446	-.409
60.00	-.600	-.758	-.827	-.695	-.572	-.442	-.403
65.00	-.651	-.727	-.834	-.690	-.578	-.449	-.413
70.00	-.593					-.433	-.002
75.00	-.628	-.673	-.777	-.660	-.549	-.424	-.391
80.00	-.611	-.628	-.757	-.646	-.537	-.417	-.381
85.00	-.619	-.551	-.731	-.633	-.525	-.412	-.381
90.00	-.569	-.480	-.712	-.607	-.511	-.404	-.367
95.00	-.448	-.419	-.705	-.599	-.497		-.356

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.357	.621	.521	.548	.472		.419
2.50	.482	.646	.566	.531	.510	-.498	.428
5.00	.643	.618	.541	.516	.481	-.448	.372
7.50	.713	.575	.507	.478	.442	-.406	.303
10.00	.678	.541	.474	.441	.406	-.391	.254
15.00	.612	.475	.423	.383	.351	-.310	.161
20.00	.534	.428	.368	.335	.298	-.250	.073
25.00	.498	.383	.324	.289	.248	-.197	.002
30.00	.435	.339	.281	.250	.205	-.143	-.071
35.00	.384	.298	.246	.208	.165	-.088	-.127
40.00	.356	.269	.207	.168	.123	-.043	-.162
45.00	.314	.230	.175	.128	.080	-.014	-.191
50.00	.273	.195	.137	.090	.043	-.063	-.217
55.00	.239	.171	.106	.058	.006	-.109	-.235
60.00	.208	.148	.086	.025	-.028	-.147	-.244
65.00	.190	.121	.051	-.008	-.055	-.187	-.269
70.00	.166						-.268
75.00	.102	.080	-.008	-.069	-.109	-.237	-.269
80.00	.115	.063	-.036	-.094	-.153	-.285	-.299
85.00	.083	-.026	-.067	-.131	-.186	-.315	-.297
90.00	.044	-.022	-.133	-.190	-.239	-.325	-.295
95.00	.023	-.086	-.196	-.251	-.292	-.334	-.305

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.90 α = 19.8°							
UPPER SURFACE							
.00	-.043	-1.106	-.932	-.859	-.724	-.596	-.533
1.25	-.601	-1.086	-.911	-.763	-.728	-.589	-.520
2.50	-.834	-1.087	-.885	-.766	-.730	-.593	-.518
5.00	-1.127	-1.086	-.905	-.778	-.697	-.580	-.526
7.50	-1.117	-1.072	-.887	-.792	-.687	-.594	-.522
10.00	-1.083	-1.060	-.887	-.788	-.682	-.596	-.512
15.00	-1.063	-1.027	-.887	-.757	-.680	-.592	-.509
20.00	-.981	-1.017	-.873	-.752	-.674	-.583	-.507
25.00	-.920	-.997	-.861	-.752	-.665	-.565	-.503
30.00	-.854	-.989	-.856	-.749	-.664	-.572	-.509
35.00	-.798	-.973	-.848	-.745	-.656	-.571	-.517
40.00	-.765	-.954	-.837	-.737	-.651	-.566	-.513
45.00	-.738	-.932	-.829	-.730	-.645	-.563	-.514
50.00	-.746	-.916	-.821	-.726	-.639	-.562	-.510
55.00	-.695	-.896	-.813	-.721	-.631	-.556	-.504
60.00	-.719	-.875	-.801	-.717	-.625	-.552	-.496
65.00	-.726	-.866	-.808	-.715	-.632	-.558	-.503
70.00	-.665						-.490
75.00	-.725	-.822	-.773	-.699	-.609	-.539	-.471
80.00	-.688	-.807	-.764	-.689	-.604	-.528	-.459
85.00	-.661	-.779	-.748	-.682	-.597	-.515	-.453
90.00	-.624	-.755	-.732	-.670	-.590	-.504	-.439
95.00	-.550	-.727	-.723	-.664	-.586	-.487	-.432
LOWER SURFACE							
1.25	.233	.604	.487	.533	.423		.378
2.50	.443	.686	.591	.552	.514	.499	.431
5.00	.699	.690	.601	.553	.518	.484	.406
7.50	.807	.662	.583	.532	.495	.455	.354
10.00	.779	.636	.560	.507	.466	.417	.313
15.00	.719	.574	.514	.457	.421	.373	.228
20.00	.644	.529	.461	.412	.368	.317	.140
25.00	.603	.488	.417	.363	.320	.262	.062
30.00	.546	.440	.376	.326	.277	.209	-.011
35.00	.496	.402	.337	.284	.233	.159	-.070
40.00	.464	.366	.296	.241	.190	.109	-.115
45.00	.420	.326	.261	.197	.145	.055	-.155
50.00	.377	.288	.218	.157	.103	-.002	-.190
55.00	.339	.257	.186	.120	.062	.051	-.222
60.00	.306	.228	.158	.083	.037	.098	-.238
65.00	.289	.200	.115	.046	-.007	.138	-.268
70.00	.252						-.291
75.00	.188	.143	-.040	-.027	-.072	-.201	-.299
80.00	.181	.118	-.002	-.059	-.117	-.252	-.327
85.00	.140	.044	-.043	-.099	-.160	-.291	-.343
90.00	.089	-.002	-.110	-.162	-.230	-.332	-.348
95.00	.052	-.104	-.185	-.232	-.288	-.372	-.360
M = 0.90 α = 26.2°							
UPPER SURFACE							
.00	-.161	-.920	-.901	-.804	-.811	-.781	-.640
1.25	-.475	-.903	-.881	-.777	-.790	-.769	-.611
2.50	-.925	-.898	-.862	-.780	-.783	-.789	-.605
5.00	-.912	-.899	-.881	-.788	-.778	-.803	-.584
7.50	-.898	-.900	-.864	-.792	-.783	-.859	-.595
10.00	-.900	-.905	-.872	-.787	-.783	-.893	-.603
15.00	-.899	-.896	-.867	-.805	-.774	-.767	-.596
20.00	-.904	-.909	-.876	-.805	-.776	-.701	-.599
25.00	-.905	-.912	-.886	-.820	-.779	-.677	-.608
30.00	-.896	-.906	-.886	-.817	-.775	-.680	-.609
35.00	-.888	-.905	-.884	-.817	-.774	-.678	-.610
40.00	-.871	-.906	-.874	-.818	-.776	-.679	-.613
45.00	-.867	-.904	-.868	-.817	-.778	-.675	-.614
50.00	-.867	-.896	-.861	-.813	-.776	-.674	-.612
55.00	-.842	-.895	-.854	-.812	-.778	-.674	-.613
60.00	-.846	-.895	-.856	-.804	-.769	-.672	-.600
65.00	-.842	-.856	-.827	-.779	-.739	-.642	-.573
70.00	-.798						-.590
75.00	-.885	-.875	-.845	-.789	-.748	-.650	-.570
80.00	-.815	-.869	-.845	-.782	-.744	-.640	-.558
85.00	-.806	-.852	-.840	-.772	-.731	-.624	-.530
90.00	-.781	-.841	-.829	-.763	-.718	-.599	-.516
95.00	-.723	-.824	-.822	-.760	-.701	-.578	-.500
LOWER SURFACE							
1.25	.069	.539	.394	.440	.320		.273
2.50	.327	.706	.629	.560	.492	.474	.409
5.00	.691	.766	.660	.601	.557	.518	.437
7.50	.865	.762	.665	.603	.560	.518	.413
10.00	.863	.750	.655	.598	.548	.492	.386
15.00	.838	.705	.626	.569	.518	.470	.334
20.00	.777	.668	.583	.533	.474	.422	.226
25.00	.737	.626	.545	.491	.435	.373	.165
30.00	.689	.583	.505	.455	.393	.327	.099
35.00	.641	.543	.470	.414	.352	.278	.053
40.00	.606	.508	.430	.373	.314	.227	-.011
45.00	.563	.462	.393	.331	.266	.174	-.061
50.00	.528	.425	.350	.284	.226	.121	-.103
55.00	.486	.394	.313	.247	.182	.067	-.143
60.00	.449	.361	.278	.206	.142	.023	-.174
65.00	.431	.331	.236	.173	.115	-.008	-.186
70.00	.377						-.222
75.00	.319	.253	.142	.083	.031	-.083	-.261
80.00	.286	.219	.097	.042	-.027	-.152	-.253
85.00	.239	.150	.046	.001	-.071	-.186	-.299
90.00	.168	.082	-.026	-.076	-.097	-.230	-.339
95.00	.112	-.038	-.110	-.158	-.227	-.313	-.362

TABLE I   BASIC WING

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
	M = 0.94 α = 0.0°							
UPPER SURFACE	.00	.027	-.541	-.462	-.723	-.445	-.485	-.465
	1.25	.234	-.053	-.098	-.109	-.077	-.072	-.081
	2.50	.166	-.042	-.084	-.120	-.150	-.171	-.080
	5.00	.095	-.045	-.095	-.135	-.122	-.095	-.097
	7.50	.054	-.062	-.105	-.135	-.167	-.118	-.137
	10.00	.035	-.076	-.126	-.143	-.191	-.131	-.178
	15.00	-.005	-.096	-.148	-.197	-.200	-.151	-.220
	20.00	-.035	-.119	-.174	-.218	-.235	-.157	-.279
	25.00	-.067	-.141	-.195	-.246	-.259	-.171	-.270
	30.00	-.090	-.161	-.231	-.254	-.249	-.190	-.234
	35.00	-.095	-.187	-.250	-.270	-.219	-.202	-.183
	40.00	-.119	-.208	-.272	-.295	-.172	-.220	-.129
	45.00	-.146	-.228	-.285	-.325	-.157	-.244	-.108
	50.00	-.185	-.257	-.296	-.325	-.171	-.253	-.098
	55.00	-.164	-.273	-.323	-.255	-.175	-.205	-.082
	60.00	-.204	-.267	-.338	-.103	-.161	-.115	-.055
	65.00	-.243	-.264	-.309	-.092	-.138	-.070	-.038
	70.00	-.196						-.017
	75.00	-.194	-.294	-.142	-.076	-.100	-.021	-.010
	80.00	-.261	-.274	-.063	-.050	-.062	-.011	-.040
	85.00	-.283	-.232	-.005	-.020	-.014	-.041	-.064
	90.00	-.275	-.136	.015	.012	.029	-.074	-.085
	95.00	-.243	-.042	.047	.025	.062	-.100	-.104
LOWER SURFACE	1.25	.209	-.086	-.155	-.188	-.244		-.256
	2.50	.151	-.057	-.110	-.158	-.205	-.171	-.224
	5.00	.078	-.053	-.111	-.101	-.209	-.181	-.206
	7.50	.053	-.072	-.128	-.149	-.231	-.186	-.228
	10.00	.025	-.083	-.139	-.168	-.248	-.181	-.246
	15.00	-.012	-.116	-.171	-.216	-.247	-.184	-.302
	20.00	-.061	-.131	-.192	-.249	-.267	-.199	-.290
	25.00	-.034	-.152	-.211	-.263	-.280	-.207	-.264
	30.00	-.108	-.177	-.237	-.276	-.274	-.221	-.226
	35.00	-.120	-.202	-.255	-.304	-.239	-.221	-.170
	40.00	-.130	-.218	-.285	-.324	-.212	-.220	-.145
	45.00	-.163	-.247	-.307	-.346	-.209	-.241	-.107
	50.00	-.198	-.273	-.333	-.344	-.195	-.251	-.102
	55.00	-.215	-.287	-.335	-.280	-.184	-.198	-.088
	60.00	-.227	-.290	-.336	-.178	-.160	-.116	-.066
	65.00	-.251	-.287	-.331	-.125	-.121	-.069	-.036
	70.00	-.247						-.017
	75.00	-.257	-.297	-.171	-.074	-.075	-.015	-.001
	80.00	-.241	-.272	-.079	-.045	-.054	-.011	-.024
	85.00	-.288	-.225	-.030	-.016	-.017	-.039	-.031
	90.00	-.285	-.157	.006	.010	.027	-.062	-.074
	95.00	-.304	-.049	.048	.052	.060	-.089	-.094
	M = 0.94 α = 4.0°							
UPPER SURFACE	.00	.028	-.244	-.120	-.365	-.057	-.127	-.048
	1.25	.061	-.823	-.935	-.934	-.946	-.976	-1.072
	2.50	-.037	-.726	-.851	-.970	-.976	-1.047	-1.050
	5.00	-.118	-.336	-.504	-.850	-.895	-.931	-.912
	7.50	-.150	-.312	-.396	-.488	-.831	-.893	-.906
	10.00	-.151	-.310	-.388	-.403	-.713	-.868	-.900
	15.00	-.179	-.293	-.381	-.432	-.447	-.767	-.866
	20.00	-.188	-.287	-.373	-.439	-.479	-.528	-.808
	25.00	-.222	-.293	-.384	-.456	-.503	-.514	-.527
	30.00	-.231	-.302	-.398	-.464	-.520	-.553	-.327
	35.00	-.226	-.319	-.412	-.478	-.538	-.568	-.105
	40.00	-.244	-.342	-.427	-.502	-.556	-.582	-.021
	45.00	-.262	-.358	-.453	-.521	-.575	-.469	-.034
	50.00	-.301	-.385	-.466	-.539	-.593	-.155	-.057
	55.00	-.271	-.401	-.472	-.547	-.570	-.047	-.068
	60.00	-.313	-.404	-.472	-.487	-.319	-.009	-.057
	65.00	-.357	-.373	-.472	-.487	-.160	-.003	-.054
	70.00	-.308						-.039
	75.00	-.309	-.420	-.432	-.168	-.043	-.015	-.028
	80.00	-.356	-.406	-.277	-.094	-.003	-.035	-.005
	85.00	-.393	-.363	-.148	-.042	-.030	-.055	-.016
	90.00	-.389	-.249	-.075	.001	.058	-.077	-.028
	95.00	-.336	-.137	-.023	.025	.078	-.098	-.039
LOWER SURFACE	1.25	.348	.339	.318	.272	.312		-.329
	2.50	.321	.269	.245	.208	.236	.278	-.247
	5.00	.264	.201	.167	.192	.149	.176	-.157
	7.50	.235	.153	.118	.135	.098	.126	-.076
	10.00	.207	.130	.087	.079	.058	.093	-.021
	15.00	.158	.071	.043	.014	.032	.049	-.082
	20.00	.103	.032	.004	-.020	.014	.005	-.157
	25.00	.107	-.000	-.036	-.050	-.042	-.029	-.238
	30.00	.046	-.028	-.074	-.075	-.064	-.058	-.273
	35.00	.012	-.058	-.093	-.102	-.080	-.092	-.271
	40.00	.001	-.080	-.120	-.118	-.092	-.118	-.245
	45.00	-.032	-.112	-.142	-.134	-.107	-.153	-.192
	50.00	-.071	-.138	-.159	-.137	-.111	-.189	-.084
	55.00	-.087	-.143	-.162	-.134	-.113	-.205	-.050
	60.00	-.104	-.149	-.161	-.119	-.103	-.193	-.038
	65.00	-.129	-.156	-.158	-.104	-.083	-.134	-.027
	70.00	-.124						-.017
	75.00	-.131	-.155	-.121	-.070	-.055	-.026	-.001
	80.00	-.125	-.138	-.089	-.043	-.044	-.006	-.012
	85.00	-.150	-.132	-.057	-.017	-.018	-.031	-.029
	90.00	-.154	-.122	-.035	.001	.008	-.053	-.048
	95.00	-.203	-.086	-.000	.037	.048	-.084	-.067

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.94   α = 5.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.024	-.017	-.095	-.204	-.332	-.410	-.362
1.25	-.035	-.976	-1.186	-1.165	-1.193	-1.181	-1.269
2.50	-.147	-1.002	-1.146	-1.197	-1.211	-1.243	-1.261
5.00	-.234	-.678	-1.099	-1.130	-1.144	-1.141	-1.175
7.50	-.266	-.548	-1.011	-1.062	-1.090	-1.117	-1.152
10.00	-.269	-.492	-.886	-1.016	-1.065	-1.083	-1.132
15.00	-.281	-.428	-.464	-.917	-1.013	-1.055	-1.106
20.00	-.274	-.405	-.431	-.531	-.976	-1.021	-1.077
25.00	-.298	-.394	-.445	-.482	-.849	-.990	-.989
30.00	-.307	-.390	-.464	-.504	-.608	-.980	-.821
35.00	-.307	-.398	-.477	-.527	-.567	-.948	-.522
40.00	-.317	-.413	-.495	-.554	-.584	-.820	-.426
45.00	-.330	-.424	-.515	-.575	-.610	-.649	-.399
50.00	-.372	-.445	-.530	-.599	-.645	-.447	-.349
55.00	-.329	-.465	-.541	-.624	-.678	-.263	-.257
60.00	-.374	-.470	-.543	-.559	-.669	-.113	-.169
65.00	-.420	-.439	-.530	-.602	-.347	-.000	-.116
70.00	-.368			-.290	-.102	.061	-.098
75.00	-.361	-.484	-.519	-.173	-.042	.074	-.076
80.00	-.408	-.488	-.374	-.100	-.010	.085	-.068
85.00	-.448	-.437	-.224	-.039	-.050	.096	-.061
90.00	-.437	-.334	-.142	-.004	-.077	.108	-.047
95.00	-.413	-.182	-.080				-.034

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.397	.452	.425	.387	.409	.360	.396
2.50	.398	.380	.345	.307	.334	.262	.321
5.00	.356	.309	.265	.287	.250	.206	.226
7.50	.330	.253	.214	.222	.192	.162	.148
10.00	.296	.221	.180	.160	.153	.118	.092
15.00	.246	.154	.126	.104	.112	.068	.007
20.00	.186	.111	.078	.064	.061	.025	-.089
25.00	.181	.074	.039	.031	.028	-.007	-.193
30.00	.121	.041	.005	.004	.000	-.043	-.246
35.00	.082	.011	-.021	-.029	-.024	-.076	-.282
40.00	.068	-.013	-.047	-.053	-.045	-.113	-.288
45.00	.031	-.045	-.072	-.076	-.065	-.149	-.291
50.00	.000	-.071	-.091	-.089	-.074	-.172	-.258
55.00	-.026	-.082	-.101	-.096	-.830	-.179	-.169
60.00	-.043	-.090	-.106	-.096	-.079	-.159	-.088
65.00	-.060	-.095	-.113	-.084	-.067		-.049
70.00	-.065					-.070	-.026
75.00	-.078	-.105	-.111	-.069	-.046	-.015	-.005
80.00	-.072	-.099	-.089	-.044	-.040	-.013	-.011
85.00	-.100	-.105	-.071	-.024	-.020	-.046	-.022
90.00	-.111	-.112	-.059	-.011	-.003	-.080	-.040
95.00	-.150	-.099	-.034	-.020	.037		-.056

M = 0.94   α = 7.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.022	-.202	-.282	-.033	-.561	-.675	-.627
1.25	-.117	-1.073	-1.275	-1.253	-1.286	-1.259	-.731
2.50	-.242	-1.067	-1.219	-1.282	-1.296	-1.317	-.734
5.00	-.343	-1.023	-1.207	-1.228	-1.241	-1.228	-.759
7.50	-.375	-.908	-1.139	-1.173	-1.196	-1.186	-.742
10.00	-.372	-.843	-1.099	-1.131	-1.173	-1.152	-.726
15.00	-.379	-.684	-.921	-1.092	-1.130	-1.104	-.729
20.00	-.360	-.528	-.646	-1.020	-1.101	-.985	-.729
25.00	-.376	-.441	-.554	-.979	-1.079	-.793	-.707
30.00	-.379	-.425	-.533	-.736	-1.028	-.715	-.683
35.00	-.369	-.435	-.537	-.656	-1.005	-.686	-.635
40.00	-.373	-.455	-.548	-.626	-.978	-.652	-.590
45.00	-.381	-.469	-.563	-.623	-.849	-.605	-.552
50.00	-.423	-.490	-.582	-.637	-.754	-.582	-.523
55.00	-.378	-.507	-.583	-.656	-.666	-.554	-.493
60.00	-.427	-.522	-.590	-.600	-.483	-.493	-.460
65.00	-.475	-.486	-.581	-.649	-.342		-.418
70.00	-.426					-.426	-.398
75.00	-.414	-.533	-.542	-.345	-.130	-.380	-.378
80.00	-.465	-.514	-.414	-.213	-.077	-.328	-.360
85.00	-.492	-.492	-.274	-.125	-.054	-.262	-.330
90.00	-.493	-.359	-.190	-.060	-.041	-.211	-.312
95.00	-.458	-.200	-.127	-.019	-.028		-.288

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.430	.528	.490	.449	.453	.408	.431
2.50	.460	.466	.424	.379	.394	.319	.375
5.00	.443	.395	.345	.345	.314	.264	.284
7.50	.424	.335	.297	.288	.258	.219	.206
10.00	.388	.301	.257	.229	.217	.170	.150
15.00	.335	.229	.205	.176	.168	.114	.043
20.00	.269	.185	.154	.133	.118	.071	-.029
25.00	.259	.145	.114	.096	.078	.034	-.126
30.00	.195	.109	.076	.060	.049	.005	-.186
35.00	.151	.077	.046	.033	.020	-.041	-.229
40.00	.133	.053	.020	.005	-.005	-.079	-.240
45.00	.096	.021	-.009	-.021	-.030	-.120	-.246
50.00	.060	-.010	-.037	-.044	-.045	-.145	-.240
55.00	.031	-.021	-.045	-.060	-.058	-.161	-.205
60.00	.011	-.034	-.056	-.064	-.058	-.160	-.166
65.00	.000	-.045	-.066	-.064	-.054		-.133
70.00	-.007					-.120	-.117
75.00	-.030	-.058	-.080	-.062	-.038	-.082	-.104
80.00	-.019	-.060	-.072	-.038	-.038	-.074	-.080
85.00	-.050	-.085	-.063	-.020	-.028	-.067	-.075
90.00	-.063	-.095	-.063	-.011	-.019		-.083
95.00	-.107	-.098	-.055	.015	-.005	.076	-.103

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.94   α = 11.4°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.011	-.585	-.648	-.253	-.871	-.738	-.564
1.25	-.264	-1.242	-1.277	-1.156	-.964	-.699	-.506
2.50	-.405	-1.228	-1.208	-1.155	-.970	-.705	-.505
5.00	-.549	-1.261	-1.182	-1.142	-.954	-.680	-.538
7.50	-.579	-1.222	-1.089	-1.142	-.957	-.686	-.502
10.00	-.577	-1.174	-1.038	-1.145	-.951	-.677	-.472
15.00	-.584	-1.079	-.991	-1.101	-.959	-.670	-.464
20.00	-.536	-1.019	-.941	-1.059	-.930	-.638	-.453
25.00	-.527	-.962	-.904	-1.027	-.887	-.604	-.419
30.00	-.516	-.851	-.871	-.986	-.866	-.607	-.420
35.00	-.496	-.676	-.840	-.933	-.834	-.593	-.405
40.00	-.494	-.514	-.813	-.890	-.791	-.572	-.392
45.00	-.499	-.498	-.793	-.847	-.740	-.553	-.383
50.00	-.530	-.535	-.781	-.799	-.702	-.543	-.379
55.00	-.483	-.564	-.763	-.757	-.670	-.522	-.370
60.00	-.530	-.591	-.765	-.731	-.644	-.503	-.368
65.00	-.574	-.580	-.752	-.699	-.645	-.503	-.389
70.00	-.525						-.390
75.00	-.530	-.601	-.610	-.622	-.564	-.460	-.360
80.00	-.557	-.591	-.536	-.592	-.540	-.440	-.354
85.00	-.582	-.567	-.460	-.551	-.507	-.426	-.360
90.00	-.571	-.404	-.405	-.505	-.475	-.413	-.346
95.00	-.530	-.234	-.362	-.471	-.447	-.397	-.341

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.408	.607	.540	.521	.492	.469	.445
2.50	.508	.574	.516	.479	.476	.396	.415
5.00	.566	.513	.458	.449	.417	.344	.334
7.50	.581	.461	.410	.397	.365	.295	.259
10.00	.547	.426	.374	.348	.326	.247	.205
15.00	.488	.356	.318	.289	.271	.187	.113
20.00	.411	.308	.265	.242	.219	.135	.012
25.00	.366	.266	.220	.197	.174	.088	-.059
30.00	.318	.228	.182	.163	.137	.039	-.120
35.00	.273	.191	.149	.127	.099	-.004	-.166
40.00	.250	.162	.116	.093	.065	-.054	-.191
45.00	.209	.127	.088	.062	.028	-.105	-.209
50.00	.173	.094	.057	.032	.000	-.146	-.231
55.00	.140	.075	.038	.009	-.031	-.181	-.241
60.00	.111	.055	.020	-.009	-.053	-.212	-.239
65.00	.096	.038	-.003	-.031	-.072		-.257
70.00	.079						-.257
75.00	.026	.015	-.034	-.063	-.106	-.246	-.255
80.00	.048	.008	-.037	-.077	-.140	-.270	-.278
85.00	.024	.019	-.041	-.096	-.164	-.292	-.277
90.00	.008	-.058	-.066	-.137	-.208	-.311	-.277
95.00	-.001	-.090	-.098	-.179	-.254	-.315	-.286

M = 0.94   α = 15.7°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.018	-.953	-1.047	-.776	-.759	-.600	-.528
1.25	-.418	-1.383	-1.113	-.861	-.755	-.594	-.512
2.50	-.624	-1.361	-1.065	-.860	-.758	-.596	-.509
5.00	-.806	-1.375	-1.105	-.856	-.745	-.583	-.513
7.50	-.833	-1.385	-1.080	-.862	-.741	-.591	-.510
10.00	-.829	-1.369	-1.081	-.878	-.735	-.583	-.503
15.00	-.820	-1.311	-1.077	-.864	-.734	-.579	-.504
20.00	-.756	-1.302	-1.041	-.851	-.720	-.571	-.499
25.00	-.714	-1.282	-1.010	-.826	-.703	-.551	-.493
30.00	-.676	-1.262	-.998	-.822	-.703	-.560	-.497
35.00	-.643	-1.230	-.978	-.808	-.696	-.556	-.498
40.00	-.631	-1.090	-.962	-.792	-.687	-.545	-.491
45.00	-.628	-.721	-.945	-.780	-.681	-.539	-.488
50.00	-.653	-.583	-.932	-.771	-.674	-.541	-.485
55.00	-.601	-.599	-.909	-.760	-.660	-.533	-.480
60.00	-.614	-.640	-.888	-.757	-.654	-.526	-.472
65.00	-.607	-.640	-.920	-.756	-.667	-.537	-.488
70.00	-.540						-.010
75.00	-.577	-.679	-.832	-.715	-.630	-.512	-.463
80.00	-.574	-.644	-.808	-.706	-.618	-.503	-.454
85.00	-.610	-.555	-.773	-.692	-.605	-.496	-.458
90.00	-.603	-.397	-.750	-.669	-.593	-.494	-.448
95.00	-.505	-.339	-.735	-.655	-.580	-.485	-.438

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.358	.642	.542	.567	.477	.496	.422
2.50	.502	.663	.581	.542	.513	.454	.434
5.00	.663	.632	.555	.527	.485	.411	.381
7.50	.731	.586	.521	.487	.447	.361	.316
10.00	.695	.555	.489	.446	.410	.319	.267
15.00	.629	.486	.440	.392	.357	.260	.181
20.00	.546	.438	.382	.346	.302	.208	.081
25.00	.511	.394	.339	.299	.259	.156	.005
30.00	.448	.353	.298	.263	.214	.104	-.071
35.00	.397	.315	.263	.220	.174	.057	-.128
40.00	.370	.280	.224	.180	.134	.005	-.176
45.00	.326	.243	.191	.144	.092	-.052	-.204
50.00	.287	.207	.157	.106	.055	-.101	-.240
55.00	.252	.184	.125	.074	.016	-.143	-.266
60.00	.219	.160	.107	.043	-.015	-.182	-.282
65.00	.206	.134	.074	.017	-.040		-.307
70.00	.176						-.326
75.00	.110	.094	.018	-.046	-.094	-.243	-.333
80.00	.122	.080	-.006	-.073	-.141	-.282	-.363
85.00	.090	.037	-.034	-.104	-.173	-.309	-.390
90.00	.048	-.010	-.091	-.158	-.241	-.351	-.399
95.00	.031	.070	-.153	-.222	-.286	-.393	-.407

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.94   α = 20.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.062	-1.170	-.984	-.899	-.821	-.638	-.573
1.25	-.507	-1.251	-.965	-.791	-.818	-.632	-.566
2.50	-.773	-1.237	-.931	-.790	-.808	-.641	-.563
5.00	-1.031	-1.232	-.965	-.795	-.742	-.625	-.570
7.50	-1.059	-1.218	-.953	-.800	-.725	-.636	-.564
10.00	-1.054	-1.200	-.960	-.820	-.718	-.638	-.558
15.00	-1.027	-1.154	-.957	-.809	-.718	-.631	-.555
20.00	-.904	-1.140	-.941	-.811	-.715	-.620	-.556
25.00	-.800	-1.116	-.926	-.805	-.707	-.602	-.555
30.00	-.734	-1.100	-.916	-.794	-.705	-.612	-.561
35.00	-.693	-1.078	-.905	-.779	-.700	-.610	-.566
40.00	-.688	-1.055	-.897	-.770	-.693	-.605	-.567
45.00	-.693	-1.027	-.889	-.762	-.689	-.601	-.566
50.00	-.718	-.997	-.884	-.758	-.682	-.603	-.564
55.00	-.677	-.958	-.870	-.753	-.673	-.598	-.561
60.00	-.704	-.932	-.858	-.749	-.670	-.596	-.552
65.00	-.723	-.892	-.864	-.749	-.675	-.600	-.556
70.00	-.673						-.535
75.00	-.715	-.836	-.822	-.730	-.648	-.584	-.533
80.00	-.689	-.811	-.812	-.720	-.645	-.578	-.519
85.00	-.686	-.760	-.793	-.715	-.638	-.572	-.512
90.00	-.666	-.720	-.785	-.708	-.629	-.567	-.499
95.00	-.559	-.683	-.779	-.693	-.620	-.558	-.483

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.253	.633	.512	.564	.448		.390
2.50	.484	.712	.615	.579	.535	.516	.452
5.00	.735	.716	.624	.581	.544	.504	.434
7.50	.836	.688	.607	.556	.523	.479	.384
10.00	.807	.658	.583	.529	.497	.430	.344
15.00	.750	.604	.539	.486	.452	.403	.268
20.00	.674	.560	.489	.444	.399	.348	.169
25.00	.634	.512	.446	.396	.357	.299	.093
30.00	.576	.473	.405	.363	.313	.247	.022
35.00	.526	.430	.370	.321	.271	.195	-.038
40.00	.494	.398	.331	.275	.229	.146	-.062
45.00	.452	.360	.294	.237	.186	.095	-.132
50.00	.411	.321	.258	.199	.148	.041	-.171
55.00	.374	.293	.226	.163	.107	-.010	-.203
60.00	.342	.263	.197	.129	.073	-.054	-.223
65.00	.325	.240	.160	.094	.045	-.098	-.254
70.00	.284						-.282
75.00	.224	.184	.081	.023	-.022	-.165	-.301
80.00	.214	.163	.050	-.007	-.070	-.217	-.328
85.00	.176	.102	-.011	-.046	-.106	-.257	-.364
90.00	.121	.052	-.057	-.108	-.167	-.297	-.392
95.00	.084	-.039	-.125	-.172	-.237	-.352	-.421

M = 0.94   α = 24.2°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.200	-.998	-.955	-.899	-.789	-.717	-.647
1.25	-.456	-.947	-.893	-.863	-.756	-.695	-.606
2.50	-.882	-.941	-.867	-.871	-.751	-.704	-.600
5.00	-.962	-.947	-.888	-.896	-.752	-.694	-.567
7.50	-.940	-.943	-.874	-.892	-.748	-.719	-.579
10.00	-.942	-.950	-.887	-.825	-.749	-.738	-.597
15.00	-.940	-.937	-.889	-.788	-.736	-.702	-.588
20.00	-.949	-.950	-.895	-.783	-.741	-.674	-.588
25.00	-.946	-.958	-.892	-.802	-.748	-.660	-.604
30.00	-.910	-.940	-.883	-.793	-.741	-.660	-.597
35.00	-.877	-.940	-.879	-.793	-.735	-.659	-.596
40.00	-.834	-.936	-.868	-.791	-.732	-.660	-.602
45.00	-.815	-.931	-.857	-.788	-.727	-.661	-.601
50.00	-.824	-.917	-.845	-.776	-.721	-.649	-.601
55.00	-.776	-.907	-.837	-.776	-.723	-.654	-.603
60.00	-.792	-.904	-.841	-.764	-.719	-.656	-.592
65.00	-.798	-.849	-.796	-.739	-.683	-.614	-.557
70.00	-.741						-.601
75.00	-.805	-.869	-.822	-.755	-.700	-.634	-.574
80.00	-.762	-.853	-.821	-.752	-.705	-.629	-.567
85.00	-.748	-.829	-.810	-.745	-.696	-.618	-.535
90.00	-.720	-.816	-.792	-.736	-.687	-.593	-.525
95.00	-.657	-.802	-.782	-.729	-.677	-.576	-.509

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.154	.601	.460	.500	.384		.330
2.50	.408	.734	.617	.585	.526	.507	.440
5.00	.735	.773	.667	.610	.570	.532	.454
7.50	.864	.761	.664	.607	.567	.524	.424
10.00	.872	.742	.648	.592	.550	.493	.394
15.00	.832	.691	.616	.559	.513	.464	.340
20.00	.769	.650	.570	.521	.470	.416	.251
25.00	.725	.609	.529	.481	.425	.368	.163
30.00	.675	.569	.493	.447	.387	.321	.096
35.00	.625	.528	.455	.404	.348	.271	.054
40.00	.591	.496	.418	.363	.307	.224	.000
45.00	.548	.454	.379	.323	.262	.174	-.058
50.00	.512	.415	.340	.281	.224	.122	-.102
55.00	.472	.384	.304	.241	.182	.071	-.143
60.00	.437	.353	.274	.206	.146	.027	-.166
65.00	.424	.328	.236	.172	.122	.003	-.176
70.00	.365						-.200
75.00	.314	.258	.146	.090	.044	.070	-.252
80.00	.283	.228	.107	.055	-.010	-.161	-.239
85.00	.238	.159	.059	.016	-.051	-.198	-.286
90.00	.172	.100	-.008	-.053	-.120	-.206	-.332
95.00	.124	-.009	-.082	-.126	-.189	-.285	-.362

TABLE I   BASIC WING

M = 0.98   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.036	-.526	-.442	.707	.375	.383	.377
1.25	.229	-.146	-.201	-.204	-.202	-.220	-.286
2.50	.159	-.103	-.151	-.200	-.238	-.320	-.266
5.00	.082	-.074	-.129	-.175	-.188	-.223	-.234
7.50	.045	-.082	-.132	-.158	-.219	-.244	-.266
10.00	.027	-.094	-.151	-.159	-.239	-.267	-.301
15.00	-.010	-.104	-.166	-.212	-.247	-.303	-.316
20.00	-.037	-.126	-.186	-.231	-.278	-.318	-.406
25.00	-.071	-.145	-.212	-.263	-.311	-.341	-.424
30.00	-.089	-.159	-.236	-.283	-.326	-.367	-.436
35.00	-.092	-.184	-.252	-.303	-.347	-.390	-.446
40.00	-.111	-.211	-.276	-.328	-.369	-.419	-.462
45.00	-.140	-.226	-.302	-.342	-.391	-.440	-.482
50.00	-.180	-.254	-.314	-.361	-.428	-.467	-.494
55.00	-.158	-.276	-.320	-.390	-.453	-.516	-.465
60.00	-.197	-.275	-.335	-.344	-.450	-.493	-.172
65.00	-.238	-.254	-.332	-.376	-.389	-.343	-.048
70.00	-.195						.042
75.00	-.191	-.299	-.346	-.300	-.231	-.146	.083
80.00	-.255	-.287	-.292	-.208	-.171	-.026	.108
85.00	-.280	-.276	-.189	-.150	-.123	.045	.130
90.00	-.282	-.240	-.137	-.103	-.079	.094	.143
95.00	-.264	-.155	-.083	-.056	-.048	.131	.159

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.262	.038	-.022	.072	-.114		-.180
2.50	.212	.042	-.003	-.052	-.102	-.105	-.177
5.00	.145	.021	-.029	-.020	-.135	-.163	-.187
7.50	.115	-.004	-.054	-.071	-.170	-.191	-.234
10.00	.091	-.021	-.073	-.103	-.191	-.214	-.253
15.00	.049	-.058	-.106	-.155	-.204	-.232	-.321
20.00	.002	-.071	-.133	-.184	-.231	-.268	-.361
25.00	-.023	-.094	-.153	-.205	-.258	-.287	-.404
30.00	-.052	-.124	-.186	-.230	-.287	-.322	-.425
35.00	-.067	-.150	-.208	-.259	-.306	-.353	-.437
40.00	-.079	-.169	-.237	-.281	-.331	-.378	-.448
45.00	-.109	-.196	-.263	-.309	-.368	-.408	-.455
50.00	-.155	-.228	-.287	-.336	-.389	-.424	-.455
55.00	-.166	-.237	-.290	-.347	-.406	-.449	-.441
60.00	-.182	-.246	-.296	-.349	-.394	-.431	-.230
65.00	-.212	-.253	-.310	-.353	-.351	-.342	-.047
70.00	-.193						-.040
75.00	-.215	-.260	-.306	-.254	-.187	-.182	-.072
80.00	-.201	-.245	-.260	-.180	-.153	-.046	-.089
85.00	-.248	-.237	-.186	-.133	-.122	.036	-.105
90.00	-.255	-.227	-.136	-.097	-.101	.069	-.131
95.00	-.301	-.154	-.071	-.051	-.059	.113	-.147

M = 0.98   α = 3.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.041	-.305	-.191	-.423	.042	.027	-.105
1.25	-.107	-.750	-.848	-.809	-.823	-.867	-.917
2.50	-.011	-.658	-.782	-.856	-.863	-.901	-.902
5.00	-.068	-.277	-.528	-.751	-.789	-.809	-.783
7.50	-.105	-.266	-.320	-.457	-.724	-.778	-.779
10.00	-.108	-.260	-.329	-.349	-.619	-.746	-.773
15.00	-.136	-.253	-.321	-.374	-.400	-.646	-.745
20.00	-.146	-.252	-.319	-.379	-.430	-.474	-.683
25.00	-.178	-.254	-.330	-.398	-.459	-.472	-.487
30.00	-.194	-.261	-.345	-.409	-.473	-.511	-.458
35.00	-.190	-.281	-.362	-.421	-.485	-.529	-.483
40.00	-.205	-.300	-.379	-.442	-.507	-.553	-.510
45.00	-.226	-.312	-.402	-.465	-.524	-.576	-.544
50.00	-.264	-.338	-.424	-.486	-.551	-.599	-.567
55.00	-.232	-.359	-.432	-.510	-.580	-.645	-.574
60.00	-.274	-.365	-.429	-.439	-.593	-.665	-.506
65.00	-.318	-.335	-.420	-.483	-.562	-.559	-.208
70.00	-.271						-.122
75.00	-.268	-.383	-.442	-.431	-.317	-.172	-.052
80.00	-.318	-.368	-.372	-.263	-.228	-.105	-.004
85.00	-.354	-.357	-.237	-.183	-.168	.055	-.052
90.00	-.353	-.282	-.158	-.118	-.121	.004	-.075
95.00	-.321	-.166	-.099	-.062	-.083	.046	-.089

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.368	.356	.332	.284	.290		.278
2.50	.348	.288	.259	.231	.215	.222	.198
5.00	.292	.220	.184	.204	.131	.121	.118
7.50	.261	.176	.142	.143	.076	.068	.041
10.00	.234	.152	.107	.092	.039	.030	-.006
15.00	.184	.087	.058	.021	.007	-.015	-.096
20.00	.130	.058	.015	-.015	-.046	-.060	-.148
25.00	.135	.024	-.023	-.048	-.082	-.092	-.260
30.00	.069	-.006	-.057	-.071	-.111	-.110	-.306
35.00	.039	-.035	-.079	-.108	-.140	-.135	-.342
40.00	.026	-.057	-.111	-.131	-.167	-.158	-.347
45.00	-.010	-.096	-.135	-.161	-.196	-.192	-.355
50.00	-.044	-.124	-.160	-.181	-.199	-.229	-.373
55.00	-.065	-.132	-.166	-.195	-.193	-.257	-.377
60.00	-.081	-.144	-.170	-.202	-.178	-.283	-.364
65.00	-.109	-.152	-.182	-.195	-.155	-.292	-.304
70.00	-.109						-.205
75.00	-.123	-.158	-.190	-.145	-.118	-.273	-.123
80.00	-.119	-.148	-.156	-.114	-.120	-.207	-.025
85.00	-.144	-.157	-.122	-.093	-.113	-.131	-.043
90.00	-.149	-.161	-.100	-.073	-.110	-.053	-.071
95.00	-.210	-.126	-.062	-.046	-.096	-.013	-.099

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.98   α = 5.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.038	-.102	-.006	-.311	-.206	-.238	-.162
1.25	-.017	-.924	-1.044	-1.014	-1.032	-1.032	-1.086
2.50	-.087	-.926	-1.014	-1.053	-1.058	-1.082	-1.079
5.00	-.175	-.588	-.957	-.991	-1.000	-.987	-.984
7.50	-.210	-.466	-.880	-.919	-.956	-.972	-.973
10.00	-.219	-.419	-.801	-.872	-.927	-.943	-.964
15.00	-.235	-.366	-.422	-.812	-.875	-.921	-.945
20.00	-.228	-.351	-.380	-.514	-.854	-.893	-.926
25.00	-.254	-.345	-.394	-.430	-.783	-.866	-.878
30.00	-.264	-.343	-.409	-.458	-.577	-.866	-.819
35.00	-.262	-.352	-.426	-.476	-.515	-.838	-.811
40.00	-.272	-.368	-.444	-.502	-.533	-.761	-.811
45.00	-.290	-.385	-.464	-.517	-.560	-.662	-.808
50.00	-.331	-.402	-.484	-.543	-.591	-.630	-.768
55.00	-.290	-.420	-.494	-.573	-.626	-.652	-.697
60.00	-.335	-.430	-.501	-.514	-.652	-.680	-.554
65.00	-.378	-.399	-.482	-.566	-.646	-.624	-.406
70.00	-.331						-.359
75.00	-.323	-.443	-.503	-.520	-.414	-.247	-.301
80.00	-.372	-.432	-.427	-.325	-.281	-.191	-.242
85.00	-.406	-.416	-.278	-.224	-.216	-.145	-.149
90.00	-.407	-.331	-.185	-.157	-.161	-.089	-.085
95.00	-.386	-.190	-.125	-.104	-.123	-.045	-.043

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.413	.460	.429	.379	.387		.372
2.50	.418	.388	.352	.309	.312	.327	.290
5.00	.375	.320	.272	.282	.226	.227	.212
7.50	.347	.267	.223	.225	.170	.174	.131
10.00	.317	.234	.189	.162	.129	.133	.081
15.00	.264	.168	.136	.097	.087	.087	.016
20.00	.206	.126	.085	.056	.032	.037	-.094
25.00	.199	.088	.046	.022	-.006	-.003	-.203
30.00	.139	.056	.012	-.007	-.037	-.036	-.260
35.00	.099	.024	-.017	-.040	-.061	-.076	-.304
40.00	.086	.003	-.045	-.070	-.087	-.103	-.328
45.00	.049	-.041	-.069	-.096	-.110	-.141	-.349
50.00	.014	-.066	-.093	-.122	-.119	-.184	-.369
55.00	-.012	-.076	-.105	-.138	-.136	-.219	-.381
60.00	-.030	-.087	-.112	-.140	-.140	-.252	-.375
65.00	-.052	-.094	-.121	-.140	-.126	-.267	-.357
70.00	-.053						-.324
75.00	-.071	-.103	-.140	-.113	-.115	-.273	-.282
80.00	-.066	-.100	-.120	-.099	-.118	-.210	-.175
85.00	-.095	-.112	-.100	-.086	-.119	-.186	-.112
90.00	-.101	-.125	-.088	-.083	-.111	-.130	-.048
95.00	-.151	-.115	-.070	-.068	-.116	-.063	-.000

M = 0.98   α = 7.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.030	-.106	-.181	-.133	-.429	-.488	-.440
1.25	-.061	-1.030	-1.148	-1.111	-1.139	-1.116	-1.180
2.50	-.184	-1.023	-1.105	-1.149	-1.160	-1.176	-1.171
5.00	-.285	-.910	-1.093	-1.094	-1.108	-1.088	-1.084
7.50	-.318	-.749	-1.028	-1.042	-1.066	-1.082	-1.079
10.00	-.320	-.674	-1.001	-1.006	-1.044	-1.052	-1.069
15.00	-.330	-.557	-.905	-.974	-1.005	-1.033	-1.042
20.00	-.315	-.475	-.634	-.917	-.984	-1.007	-1.023
25.00	-.334	-.428	-.495	-.902	-.973	-.975	-.975
30.00	-.335	-.409	-.468	-.717	-.927	-.984	-.930
35.00	-.329	-.410	-.477	-.584	-.906	-.972	-.915
40.00	-.336	-.423	-.491	-.555	-.894	-.961	-.905
45.00	-.346	-.437	-.511	-.557	-.823	-.949	-.893
50.00	-.387	-.457	-.531	-.574	-.714	-.936	-.839
55.00	-.343	-.470	-.544	-.605	-.680	-.951	-.630
60.00	-.388	-.484	-.549	-.547	-.674	-.764	-.659
65.00	-.434	-.453	-.541	-.606	-.666	-.609	-.663
70.00	-.386						-.662
75.00	-.373	-.496	-.548	-.558	-.435	-.584	-.649
80.00	-.429	-.481	-.465	-.371	-.347	-.572	-.613
85.00	-.456	-.466	-.309	-.260	-.290	-.486	-.541
90.00	-.456	-.374	-.213	-.191	-.238	-.293	-.500
95.00	-.434	-.213	-.154	-.121	-.190	-.034	-.462

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.445	.539	.488	.456	.446		.415
2.50	.476	.472	.423	.379	.382	.387	.350
5.00	.455	.396	.346	.336	.300	.296	.261
7.50	.436	.342	.298	.284	.246	.243	.185
10.00	.403	.308	.260	.232	.203	.193	.132
15.00	.346	.240	.208	.173	.156	.149	.037
20.00	.281	.194	.153	.131	.102	.094	-.046
25.00	.272	.155	.116	.089	.063	.052	-.159
30.00	.204	.120	.079	.059	.031	.012	-.225
35.00	.163	.086	.049	.024	.002	-.029	-.273
40.00	.145	.058	.014	-.010	-.028	-.063	-.303
45.00	.105	.025	-.010	-.035	-.060	-.106	-.333
50.00	.069	-.004	-.035	-.064	-.080	-.147	-.356
55.00	.042	-.018	-.049	-.076	-.099	-.191	-.372
60.00	.019	-.033	-.060	-.080	-.104	-.224	-.376
65.00	.004	-.044	-.079	-.090	-.096	-.245	-.366
70.00	.001						-.333
75.00	-.022	-.056	-.100	-.099	-.100	-.267	-.286
80.00	-.019	-.058	-.085	-.090	-.115	-.211	-.174
85.00	-.046	-.083	-.070	-.082	-.117	-.184	-.150
90.00	-.054	-.103	-.083	-.082	-.125	-.137	-.135
95.00	-.098	-.106	-.082	-.074	-.135	-.041	-.171

TABLE I   BASIC WING

M = 0.98   α = 11.5°

UPPER SURFACE

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.006	-.465	-.511	-.121	-.758	-.861	-.794
1.25	-.180	-1.125	-1.176	-1.284	-1.310	-1.080	-1.017
2.50	-.313	-1.112	-1.129	-1.291	-1.313	-1.086	-1.027
5.00	-.456	-1.142	-1.152	-1.254	-1.281	-1.045	-.992
7.50	-.489	-1.105	-1.053	-1.218	-1.252	-1.067	-.910
10.00	-.493	-1.052	-.987	-1.192	-1.230	-1.048	-.837
15.00	-.499	-.962	-.921	-1.137	-1.190	-1.030	-.836
20.00	-.460	-.907	-.861	-1.076	-1.147	-.990	-.837
25.00	-.454	-.849	-.817	-1.052	-1.118	-.938	-.819
30.00	-.446	-.755	-.790	-.998	-1.093	-.933	-.804
35.00	-.426	-.601	-.769	-.922	-1.067	-.894	-.772
40.00	-.424	-.460	-.755	-.881	-1.035	-.844	-.736
45.00	-.430	-.441	-.744	-.856	-.954	-.798	-.702
50.00	-.462	-.474	-.737	-.834	-.864	-.751	-.673
55.00	-.421	-.501	-.719	-.807	-.839	-.707	-.640
60.00	-.464	-.525	-.719	-.755	-.828	-.665	-.610
65.00	-.504	-.520	-.716	-.686	-.812	-.653	-.602
70.00	-.464						-.577
75.00	-.459	-.543	-.660	-.531	-.781	-.620	-.545
80.00	-.498	-.540	-.579	-.459	-.773	-.610	-.527
85.00	-.517	-.533	-.482	-.385	-.737	-.594	-.522
90.00	-.516	-.450	-.404	-.320	-.683	-.581	-.510
95.00	-.496	-.255	-.351	-.276	-.611	-.556	-.501

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.439	.640	.563	.558	.503	.481	.460
2.50	.545	.602	.536	.495	.478		.433
5.00	.598	.541	.471	.465	.417	.408	.356
7.50	.611	.487	.427	.408	.364	.356	.281
10.00	.578	.454	.391	.352	.325	.305	.231
15.00	.515	.383	.337	.299	.273	.259	.145
20.00	.440	.338	.282	.253	.219	.203	.002
25.00	.415	.293	.241	.209	.175	.157	-.046
30.00	.351	.255	.203	.179	.140	.110	-.118
35.00	.302	.220	.170	.140	.104	.065	-.176
40.00	.281	.188	.137	.104	.072	.022	-.217
45.00	.239	.153	.109	.072	.033	-.025	-.248
50.00	.206	.119	.079	.043	.005	-.073	-.277
55.00	.169	.100	.062	.019	-.022	-.117	-.298
60.00	.141	.081	.045	.002	-.043	-.154	-.300
65.00	.131	.067	.021	-.014	-.059	-.181	-.310
70.00	.108						-.312
75.00	.045	.045	-.022	-.048	-.082	-.229	-.316
80.00	.072	.040	-.027	-.060	-.108	-.259	-.325
85.00	.045	.001	-.030	-.081	-.123	-.288	-.354
90.00	.025	-.033	-.051	-.108	-.158	-.307	-.364
95.00	.021	-.080	-.078	-.134	-.190	-.344	-.392

M = 0.98   α = 15.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.157	-.839	-.933	-.736	-1.040	-.665	-.503
1.25	-.325	-1.263	-1.193	-1.152	-.937	-.660	-.481
2.50	-.532	-1.241	-1.127	-1.128	-.938	-.662	-.482
5.00	-.704	-1.257	-1.171	-1.111	-.933	-.641	-.482
7.50	-.741	-1.263	-1.150	-1.114	-.933	-.647	-.497
10.00	-.737	-1.247	-1.168	-1.098	-.930	-.642	-.509
15.00	-.729	-1.189	-1.176	-1.083	-.925	-.632	-.528
20.00	-.673	-1.181	-1.177	-1.089	-.911	-.625	-.547
25.00	-.631	-1.167	-1.173	-1.078	-.892	-.608	-.563
30.00	-.597	-1.158	-1.170	-1.059	-.878	-.622	-.578
35.00	-.565	-1.145	-1.162	-1.035	-.858	-.619	-.587
40.00	-.556	-1.079	-1.154	-1.009	-.834	-.615	-.589
45.00	-.556	-.753	-1.144	-.980	-.811	-.610	-.592
50.00	-.581	-.596	-1.135	-.954	-.791	-.608	-.593
55.00	-.546	-.577	-1.117	-.930	-.770	-.605	-.588
60.00	-.580	-.593	-1.124	-.896	-.751	-.604	-.580
65.00	-.615	-.596	-1.118		-.739	-.611	-.584
70.00	-.582						-.580
75.00	-.606	-.640	-1.058	-.825	-.696	-.611	-.570
80.00	-.623	-.638	-.962	-.810	-.684	-.610	-.562
85.00	-.634	-.630	-.862	-.787	-.670	-.607	-.558
90.00	-.629	-.491	-.750	-.756	-.655	-.604	-.548
95.00	-.562	-.314	-.564	-.727	-.641	-.597	-.540

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.378	.678	.574	.589	.502	.529	.453
2.50	.539	.694	.604	.565	.537	.488	.473
5.00	.702	.660	.578	.550	.513	.448	.422
7.50	.764	.617	.546	.509	.475	.436	.363
10.00	.729	.583	.513	.470	.441	.362	.321
15.00	.658	.518	.462	.421	.395	.307	.235
20.00	.580	.471	.410	.374	.342	.255	.141
25.00	.546	.427	.366	.333	.300	.208	.061
30.00	.483	.385	.328	.296	.261	.162	.012
35.00	.433	.346	.292	.255	.224	.116	-.071
40.00	.401	.316	.257	.222	.190	.066	-.113
45.00	.362	.276	.224	.186	.147	.014	-.154
50.00	.325	.244	.192	.155	.117	-.034	-.198
55.00	.288	.219	.167	.127	.084	-.077	-.226
60.00	.256	.196	.144	.106	.056	-.113	-.246
65.00	.247	.175	.112	.082	.030		-.270
70.00	.208						-.295
75.00	.148	.135	.062	.039	-.023	-.179	-.313
80.00	.146	.119	.049	.018	-.066	-.193	-.333
85.00	.113	.067	.039	-.016	-.099	-.243	-.363
90.00	.063	.021	.020	-.071	-.107	-.292	-.393
95.00	.039	.052	.007	-.135	-.212	-.341	-.432

TABLE I

BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.98 α = 20.2°							
UPPER SURFACE							
.00	-.258	-1.067	-1.105	-.931	-.808	-.727	-.662
1.25	-.408	-1.217	-1.070	-.850	-.787	-.710	-.638
2.50	-.685	-1.206	-1.028	-.851	-.780	-.714	-.635
5.00	-.933	-1.211	-1.064	-.856	-.780	-.694	-.612
7.50	-.951	-1.210	-1.047	-.853	-.780	-.708	-.625
10.00	-.939	-1.219	-1.063	-.843	-.780	-.706	-.632
15.00	-.918	-1.183	-1.050	-.863	-.773	-.699	-.627
20.00	-.841	-1.191	-1.057	-.856	-.782	-.698	-.625
25.00	-.769	-1.200	-1.052	-.867	-.786	-.684	-.631
30.00	-.711	-1.152	-1.030	-.856	-.778	-.687	-.623
35.00	-.674	-1.160	-1.016	-.854	-.772	-.681	-.621
40.00	-.659	-1.158	-.992	-.847	-.770	-.680	-.620
45.00	-.654	-1.123	-.970	-.840	-.764	-.675	-.615
50.00	-.674	-1.014	-.952	-.829	-.759	-.668	-.613
55.00	-.645	-.860	-.931	-.825	-.757	-.669	-.610
60.00	-.666	-.747	-.930	-.818	-.750	-.667	-.602
65.00	-.684	-.689	-.885	-.791	-.725	-.641	-.582
70.00	-.649						-.253
75.00	-.673	-.660	-.892	-.797	-.728	-.653	-.589
80.00	-.664	-.583	-.886	-.793	-.727	-.647	-.583
85.00	-.633	-.544	-.865	-.781	-.715	-.639	-.568
90.00	-.597	-.460	-.852	-.769	-.696	-.624	-.560
95.00	-.546	-.385	-.850	-.761	-.686	-.610	-.553
LOWER SURFACE							
1.25	.279	.665	.542	.569	.464		.410
2.50	.517	.740	.641	.602	.553	.534	.474
5.00	.768	.742	.650	.603	.567	.528	.459
7.50	.868	.712	.631	.580	.543	.501	.417
10.00	.836	.683	.608	.556	.517	.463	.376
15.00	.778	.626	.564	.513	.476	.429	.305
20.00	.705	.585	.516	.473	.437	.379	.202
25.00	.665	.542	.473	.429	.383	.326	.134
30.00	.608	.500	.435	.393	.343	.282	.060
35.00	.558	.460	.398	.351	.305	.236	.006
40.00	.525	.428	.361	.313	.264	.184	-.056
45.00	.484	.389	.329	.275	.222	.135	-.095
50.00	.449	.351	.291	.237	.184	.084	-.134
55.00	.408	.325	.262	.200	.147	.033	-.169
60.00	.376	.298	.235	.171	.111	-.008	-.192
65.00	.364	.277	.290	.141	.089	-.044	-.210
70.00	.315			.071	-.034		-.259
75.00	.263	.223	.131	.043	-.021	-.111	-.270
80.00	.237	.201	.100	.008	-.062	-.181	-.272
85.00	.199	.143	.064	-.053	-.120	-.218	-.320
90.00	.140	.094	.008	-.116	-.180	-.234	-.353
95.00	.094	.010	-.061			-.296	-.389
M = 1.00 α = 0.0°							
UPPER SURFACE							
.00	.074	.582	.503	.747	.472	.473	.434
1.25	.288	.006	-.045	-.074	-.047	-.062	-.123
2.50	.227	-.015	-.034	-.082	-.088	-.180	-.129
5.00	.157	-.011	-.044	-.097	-.138	-.127	-.142
7.50	.117	-.005	-.050	-.096	-.163	-.161	-.168
10.00	.097	-.021	-.075	-.103	-.183	-.186	-.207
15.00	.057	-.036	-.096	-.144	-.216	-.226	-.238
20.00	.028	-.057	-.121	-.164	-.249	-.239	-.332
25.00	.005	-.079	-.147	-.195	-.263	-.265	-.361
30.00	-.030	-.100	-.175	-.222	-.282	-.298	-.374
35.00	-.034	-.127	-.196	-.245	-.307	-.326	-.392
40.00	-.055	-.152	-.220	-.267	-.338	-.360	-.414
45.00	-.083	-.168	-.248	-.282	-.373	-.384	-.433
50.00	-.124	-.197	-.259	-.305	-.399	-.418	-.445
55.00	-.103	-.224	-.265	-.339	-.390	-.456	-.468
60.00	-.144	-.222	-.286	-.291	-.360	-.464	-.412
65.00	-.187	-.205	-.286	-.326		-.344	-.258
70.00	-.147		-.298	-.286	-.211	-.238	-.208
75.00	-.137	-.247	-.259	-.184	-.155	-.183	-.147
80.00	-.200	-.242	-.161	-.131	-.111	-.125	-.091
85.00	-.232	-.237	-.114	-.086	-.070	-.071	-.022
90.00	-.234	-.210	-.062	-.053	-.045	-.027	-.030
95.00	-.220	-.132					-.066
LOWER SURFACE							
1.25	.265	-.013	-.079	-.115	-.180		-.245
2.50	.211	-.012	-.045	-.103	-.144	-.160	-.213
5.00	.140	-.011	-.050	-.051	-.159	-.197	-.202
7.50	.116	-.007	-.069	-.093	-.185	-.211	-.241
10.00	.094	-.024	-.083	-.112	-.201	-.228	-.255
15.00	.053	-.052	-.114	-.164	-.215	-.242	-.300
20.00	.001	-.064	-.138	-.187	-.234	-.278	-.334
25.00	-.028	-.083	-.155	-.205	-.263	-.294	-.378
30.00	-.044	-.113	-.179	-.222	-.287	-.324	-.391
35.00	-.058	-.138	-.202	-.257	-.306	-.352	-.408
40.00	-.065	-.158	-.224	-.279	-.329	-.373	-.426
45.00	-.097	-.184	-.253	-.308	-.366	-.403	-.444
50.00	-.136	-.213	-.281	-.328	-.387	-.433	-.459
55.00	-.151	-.224	-.288	-.343	-.405	-.473	-.488
60.00	-.169	-.233	-.290	-.345	-.404	-.497	-.470
65.00	-.197	-.235	-.298	-.345	-.389	-.418	-.277
70.00	-.190		-.299	-.292	-.199	-.227	-.204
75.00	-.204	-.246	-.264	-.187	-.161	-.149	-.136
80.00	-.184	-.233	-.191	-.128	-.122	-.122	-.089
85.00	-.237	-.227	-.129	-.084	-.093	-.086	-.021
90.00	-.238	-.214	-.060	-.038	-.055	-.039	-.021
95.00	-.287	-.135					.059

TABLE I — BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.00   α = 3.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.067	.333	-.221	-.456	-.073	-.053	-.176
1.25	.131	-.704	-.804	-.768	-.773	-.821	-.857
2.50	.041	-.621	-.739	-.813	-.817	-.854	-.846
5.00	-.038	-.246	-.510	-.714	-.746	-.766	-.735
7.50	-.074	-.239	-.298	-.441	-.686	-.735	-.727
10.00	-.078	-.233	-.301	-.333	-.596	-.709	-.723
15.00	-.108	-.236	-.299	-.352	-.372	-.621	-.702
20.00	-.118	-.225	-.296	-.355	-.406	-.449	-.644
25.00	-.151	-.230	-.306	-.372	-.437	-.450	-.463
30.00	-.167	-.235	-.320	-.385	-.452	-.488	-.430
35.00	-.163	-.251	-.338	-.398	-.463	-.506	-.455
40.00	-.179	-.273	-.356	-.420	-.483	-.528	-.479
45.00	-.201	-.289	-.376	-.441	-.503	-.553	-.511
50.00	-.239	-.313	-.396	-.464	-.528	-.573	-.536
55.00	-.206	-.333	-.409	-.490	-.558	-.616	-.568
60.00	-.249	-.342	-.409	-.426	-.576	-.639	-.571
65.00	-.293	-.312	-.396	-.460	-.550	-.609	-.565
70.00	-.250					-.250	-.326
75.00	-.242	-.360	-.426	-.452	-.364	-.183	-.182
80.00	-.290	-.348	-.368	-.281	-.242	-.136	-.133
85.00	-.330	-.339	-.238	-.186	-.179	-.092	-.087
90.00	-.329	-.275	-.154	-.124	-.132	-.063	-.049
95.00	-.299	-.158	-.092	-.083	-.100		-.016

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.385	.372	.340	.292	.295		.281
2.50	.368	.307	.271	.240	.219	.225	.203
5.00	.313	.242	.199	.213	.136	.127	.124
7.50	.281	.195	.153	.149	.083	.074	.051
10.00	.254	.169	.121	.108	.042	.040	-.006
15.00	.207	.109	.077	.033	.011	.007	-.078
20.00	.151	.079	.029	-.003	-.039	-.056	-.142
25.00	.156	.047	-.009	-.039	-.078	-.097	-.236
30.00	.093	.016	-.038	-.066	-.105	-.127	-.283
35.00	.059	-.015	-.063	-.098	-.134	-.153	-.324
40.00	.049	-.038	-.093	-.124	-.162	-.164	-.330
45.00	.013	-.074	-.119	-.154	-.195	-.189	-.346
50.00	-.024	-.105	-.147	-.173	-.212	-.221	-.353
55.00	-.043	-.113	-.157	-.185	-.212	-.251	-.359
60.00	-.062	-.126	-.160	-.200	-.191	-.275	-.350
65.00	-.089	-.138	-.169	-.200	-.174	-.283	-.333
70.00	-.089					-.275	-.305
75.00	-.104	-.141	-.180	-.151	-.127	-.209	-.275
80.00	-.100	-.132	-.152	-.119	-.119	-.191	-.197
85.00	-.130	-.141	-.119	-.097	-.107	-.165	-.143
90.00	-.138	-.146	-.099	-.083	-.105	-.101	-.108
95.00	-.193	-.112	-.059	-.054	-.098		-.036

M = 1.00   α = 5.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.044	-.142	-.030	-.333	-.154	-.187	-.091
1.25	-.053	-.873	-.975	-.939	-.950	-.961	-1.015
2.50	-.051	-.862	-.946	-.990	-.984	-1.008	-1.011
5.00	-.138	-.545	-.898	-.925	-.927	-.919	-.920
7.50	-.173	-.414	-.809	-.856	-.883	-.899	-.909
10.00	-.183	-.372	-.755	-.806	-.860	-.875	-.900
15.00	-.199	-.325	-.383	-.765	-.804	-.856	-.881
20.00	-.194	-.314	-.349	-.493	-.785	-.826	-.861
25.00	-.221	-.310	-.366	-.401	-.743	-.804	-.821
30.00	-.230	-.309	-.379	-.423	-.547	-.803	-.768
35.00	-.230	-.317	-.394	-.443	-.480	-.783	-.753
40.00	-.240	-.334	-.412	-.471	-.496	-.726	-.753
45.00	-.256	-.349	-.433	-.491	-.523	-.625	-.753
50.00	-.296	-.369	-.451	-.512	-.554	-.590	-.744
55.00	-.260	-.387	-.463	-.540	-.587	-.608	-.698
60.00	-.302	-.398	-.473	-.483	-.612	-.635	-.620
65.00	-.347	-.369	-.457	-.533	-.607	-.628	-.557
70.00	-.304					-.282	-.441
75.00	-.288	-.411	-.477	-.517	-.472	-.219	-.348
80.00	-.343	-.399	-.419	-.344	-.290	-.180	-.315
85.00	-.375	-.390	-.275	-.220	-.214	-.138	-.268
90.00	-.371	-.314	-.177	-.154	-.163	-.102	-.228
95.00	-.360	-.174	-.119	-.094	-.126		-.159

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.431	.480	.441	.395	.396		.387
2.50	.436	.408	.367	.325	.325	.330	.312
5.00	.397	.339	.288	.299	.241	.234	.227
7.50	.368	.286	.240	.240	.184	.180	.152
10.00	.338	.255	.203	.179	.144	.144	.107
15.00	.290	.188	.151	.114	.103	.095	.003
20.00	.228	.149	.102	.076	.049	.044	-.076
25.00	.224	.113	.063	.041	.010	.008	-.170
30.00	.163	.080	.029	.011	-.021	-.025	-.232
35.00	.123	.045	.003	-.020	-.052	-.057	-.281
40.00	.108	.020	-.028	-.053	-.077	-.088	-.297
45.00	.072	-.014	-.051	-.077	-.103	-.125	-.317
50.00	.037	-.044	-.081	-.101	-.118	-.165	-.339
55.00	.010	-.055	-.092	-.116	-.124	-.200	-.352
60.00	-.009	-.069	-.095	-.131	-.121	-.229	-.352
65.00	-.031	-.083	-.107	-.131	-.116	-.245	-.349
70.00	-.031					-.257	-.342
75.00	-.053	-.086	-.125	-.105	-.099	-.202	-.326
80.00	-.047	-.081	-.109	-.094	-.103	-.197	-.268
85.00	-.076	-.097	-.092	-.078	-.099	-.188	-.234
90.00	-.084	-.108	-.084	-.072	-.100	-.126	-.171
95.00	-.129	-.097	-.063	-.050	-.105		-.111

TABLE I BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.00   α = 7.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.001	-.061	-.136	-.168	-.370	-.431	-.374
1.25	-.026	-1.002	-1.076	-1.042	-1.066	-1.061	-1.104
2.50	-.143	-.984	-1.035	-1.079	-1.082	-1.105	-1.099
5.00	-.243	-.858	-1.025	-1.031	-1.035	-1.021	-1.015
7.50	-.276	-.671	-.962	-.984	-.996	-1.010	-1.002
10.00	-.280	-.580	-.937	-.943	-.978	-.985	-.995
15.00	-.290	-.477	-.836	-.915	-.939	-.965	-.979
20.00	-.278	-.426	-.607	-.858	-.918	-.943	-.963
25.00	-.296	-.398	-.463	-.842	-.911	-.914	-.917
30.00	-.298	-.383	-.434	-.702	-.865	-.921	-.874
35.00	-.293	-.382	-.437	-.552	-.837	-.908	-.867
40.00	-.300	-.395	-.457	-.522	-.827	-.900	-.865
45.00	-.319	-.405	-.475	-.524	-.780	-.890	-.868
50.00	-.354	-.423	-.499	-.541	-.685	-.873	-.872
55.00	-.315	-.439	-.506	-.570	-.643	-.893	-.848
60.00	-.356	-.452	-.517	-.574	-.635	-.885	-.570
65.00	-.398	-.423	-.505	-.576	-.627	-.608	-.579
70.00	-.358						-.621
75.00	-.335	-.461	-.520	-.565	-.463	-.544	-.660
80.00	-.403	-.449	-.460	-.391	-.341	-.546	-.669
85.00	-.422	-.439	-.305	-.260	-.285	-.509	-.632
90.00	-.419	-.360	-.205	-.186	-.238	-.393	-.609
95.00	-.404	-.201	-.140	-.134	-.203	-.220	-.563

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.463	.552	.505	.463	.450		.435
2.50	.494	.483	.441	.394	.388	.395	.371
5.00	.471	.416	.361	.348	.306	.302	.288
7.50	.447	.360	.311	.295	.251	.250	.212
10.00	.418	.325	.277	.245	.212	.201	.160
15.00	.367	.252	.220	.183	.162	.158	.064
20.00	.301	.214	.167	.142	.111	.104	-.005
25.00	.291	.173	.132	.104	.072	.062	-.121
30.00	.226	.135	.089	.073	.038	.026	-.190
35.00	.182	.102	.062	.040	.008	.015	-.243
40.00	.163	.076	.031	.005	-.019	-.049	-.271
45.00	.125	.039	.008	-.023	-.046	-.086	-.297
50.00	.090	.012	-.018	-.054	-.067	-.128	-.323
55.00	.061	-.002	-.030	-.070	-.086	-.167	-.341
60.00	.035	-.017	-.043	-.078	-.094	-.202	-.344
65.00	.020	-.029	-.059	-.086	-.092	-.222	-.344
70.00	.013						-.344
75.00	-.022	-.037	-.087	-.084	-.086	-.249	-.341
80.00	-.002	-.031	-.082	-.075	-.097	-.204	-.281
85.00	-.024	-.003	-.074	-.071	-.101	-.207	-.233
90.00	-.036	-.079	-.073	-.071	-.114	-.212	-.190
95.00	-.053	-.089	-.064	-.065	-.126	-.109	-.200

M = 1.00   α = 11.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.118	-.440	-.472	-.083	-.713	-.822	-.756
1.25	-.164	-1.103	-1.141	-1.227	-1.268	-1.210	-1.085
2.50	-.296	-1.090	-1.092	-1.240	-1.267	-1.231	-1.078
5.00	-.440	-1.115	-1.126	-1.203	-1.238	-1.166	-1.053
7.50	-.475	-1.083	-1.039	-1.170	-1.207	-1.185	-1.019
10.00	-.481	-1.024	-.977	-1.141	-1.184	-1.157	-.984
15.00	-.488	-.934	-.903	-1.090	-1.156	-1.125	-.952
20.00	-.450	-.881	-.839	-1.031	-1.134	-1.080	-.935
25.00	-.443	-.826	-.802	-.998	-1.106	-1.017	-.904
30.00	-.433	-.735	-.774	-.953	-1.093	-1.016	-.870
35.00	-.416	-.587	-.755	-.882	-1.081	-.965	-.825
40.00	-.415	-.455	-.741	-.839	-1.070	-.895	-.782
45.00	-.419	-.432	-.731	-.817	-.993	-.840	-.751
50.00	-.446	-.463	-.725	-.800	-.842	-.807	-.730
55.00	-.413	-.491	-.706	-.774	-.789	-.777	-.709
60.00	-.452	-.514	-.708	-.729	-.777	-.754	-.684
65.00	-.494	-.510	-.703	-.666	-.775	-.740	-.677
70.00	-.463						-.645
75.00	-.438	-.533	-.661	-.534	-.777	-.715	-.619
80.00	-.502	-.529	-.585	-.476	-.780	-.696	-.600
85.00	-.508	-.525	-.484	-.412	-.754	-.669	-.592
90.00	-.507	-.454	-.402	-.352	-.709	-.643	-.572
95.00	-.493	-.255	-.348	-.293	-.639	-.606	-.561

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.438	.644	.575	.570	.516		.474
2.50	.547	.608	.544	.508	.490	.485	.444
5.00	.604	.547	.482	.477	.426	.409	.365
7.50	.615	.492	.437	.422	.375	.360	.293
10.00	.579	.458	.401	.364	.338	.313	.245
15.00	.520	.389	.347	.311	.287	.267	.158
20.00	.443	.340	.293	.265	.235	.210	.068
25.00	.416	.297	.251	.226	.189	.162	.034
30.00	.352	.260	.212	.192	.154	.117	-.108
35.00	.304	.224	.180	.154	.119	.072	-.164
40.00	.279	.192	.148	.121	.087	.031	-.207
45.00	.242	.156	.131	.087	.053	.014	-.243
50.00	.208	.123	.090	.058	.023	-.064	-.274
55.00	.171	.102	.073	.036	.004	-.107	-.301
60.00	.141	.084	.058	.018	-.024	-.146	-.305
65.00	.130	.069	.031	.004	-.043	-.176	-.319
70.00	.103						-.317
75.00	-.035	.048	-.011	-.029	-.065	-.222	-.320
80.00	-.057	.045	-.017	-.042	-.096	-.206	-.327
85.00	-.030	-.005	-.017	-.063	-.114	-.255	-.345
90.00	-.004	-.029	-.036	-.096	-.149	-.297	-.358
95.00	-.012	-.074	-.062	-.131	-.174	-.334	-.392

TABLE I BASIC WING

PRESSURE COEFFICIENT, P, AT:

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 1.00 α = 15.9°							
UPPER SURFACE							
.00	-.285	-.788	-.879	-.696	-1.003	-.835	-.403
1.25	-.286	-1.207	-1.138	-1.127	-.975	-.784	-.380
2.50	-.490	-1.186	-1.074	-1.105	-.973	-.788	-.382
5.00	-.664	-1.199	-1.114	-1.088	-.969	-.754	-.391
7.50	-.699	-1.206	-1.092	-1.088	-.960	-.762	-.414
10.00	-.697	-1.192	-1.115	-1.088	-.954	-.753	-.440
15.00	-.691	-1.137	-1.120	-1.081	-.943	-.731	-.475
20.00	-.634	-1.129	-1.122	-1.072	-.933	-.721	-.512
25.00	-.595	-1.116	-1.120	-1.096	-.920	-.711	-.545
30.00	-.564	-1.105	-1.114	-1.094	-.904	-.713	-.567
35.00	-.534	-1.092	-1.109	-1.091	-.888	-.698	-.579
40.00	-.522	-1.030	-1.099	-1.088	-.870	-.679	-.587
45.0C	-.522	-.732	-1.091	-1.077	-.855	-.659	-.591
50.00	-.542	-.567	-1.081	-1.038	-.830	-.645	-.590
55.00	-.518	-.545	-1.067	-.979	-.810	-.633	-.593
60.00	-.545	-.562	-1.079	-.947	-.794	-.624	-.586
65.00	-.581	-.565	-1.066	-.911	-.773	-.618	-.589
70.00	-.556						-.275
75.00	-.556	-.609	-1.064	-.852	-.728	-.617	-.583
80.00	-.598	-.607	-1.017	-.831	-.712	-.613	-.569
85.00	-.600	-.603	-.941	-.808	-.688	-.609	-.567
90.00	-.600	-.499	-.835	-.794	-.671	-.605	-.559
95.00	-.547	-.315	-.626	-.774	-.653	-.599	-.550
LOWER SURFACE							
1.25	.391	.689	.588	.595	.519	.540	.482
2.50	.558	.703	.621	.575	.548	.500	.494
5.00	.718	.670	.590	.556	.522	.461	.444
7.50	.784	.629	.557	.521	.484	.418	.385
10.00	.745	.593	.525	.480	.449	.377	.341
15.00	.677	.529	.476	.427	.403	.320	.258
20.00	.597	.483	.423	.384	.351	.274	.153
25.00	.563	.437	.381	.341	.307	.229	.083
30.00	.500	.397	.342	.307	.269	.180	.013
35.00	.449	.359	.305	.267	.232	.137	-.043
40.00	.421	.328	.268	.229	.197	.086	-.092
45.00	.379	.289	.238	.193	.157	.038	-.132
50.00	.344	.254	.206	.158	.128	-.007	-.173
55.00	.305	.230	.180	.131	.095	-.052	-.200
60.00	.274	.210	.158	.106	.069	-.087	-.222
65.00	.268	.190	.124	.086	.048		-.243
70.00	.221						-.285
75.00	.165	.151	.068	.041	-.002	-.145	-.290
80.00	.157	.135	.048	.022	-.041	-.204	-.309
85.00	.124	.086	.033	-.005	-.076	-.241	-.339
90.00	.067	.039	.000	-.058	-.123	-.258	-.367
95.00	.041	-.033	-.025	-.118	-.182	-.302	-.404
M = 1.03 α = 0.0°							
UPPER SURFACE							
.00	-.043	.578	.501	.746	.486	.505	.471
1.25	.240	-.007	-.038	-.042	-.017	.015	-.079
2.50	.183	-.002	-.029	-.066	-.086	-.133	-.087
5.00	.118	-.004	-.036	-.080	-.059	-.079	-.101
7.50	.081	-.018	-.041	-.078	-.106	-.115	-.129
10.00	.065	-.032	-.070	-.090	-.130	-.139	-.173
15.00	.035	-.043	-.089	-.130	-.147	-.185	-.189
20.00	.011	-.065	-.116	-.147	-.179	-.202	-.289
25.00	-.022	-.083	-.139	-.178	-.210	-.224	-.321
30.00	-.042	-.099	-.166	-.199	-.231	-.252	-.334
35.00	-.044	-.124	-.181	-.221	-.250	-.274	-.360
40.00	-.060	-.149	-.209	-.253	-.274	-.299	-.370
45.00	-.089	-.167	-.233	-.274	-.286	-.328	-.395
50.00	-.118	-.194	-.252	-.290	-.314	-.361	-.411
55.00	-.114	-.219	-.259	-.307	-.345	-.411	-.432
60.00	-.140	-.224	-.267	-.268	-.350	-.423	-.408
65.00	-.179	-.205	-.263	-.300	-.310	-.351	-.271
70.00	-.154	-.240	-.281	-.287	-.164	-.196	-.189
75.00	-.115	-.230	-.247	-.167	-.102	-.140	-.111
80.00	-.207	-.227	-.165	-.100	-.057	-.084	-.059
85.00	-.214	-.206	-.098	-.046	-.017	-.031	-.000
90.00	-.218	-.128	-.042	-.024	-.004	-.015	.056
95.00	-.210						.087
LOWER SURFACE							
1.25	.207	-.048	-.104	-.131	-.181		-.237
2.50	.164	-.017	-.059	-.106	-.137	-.132	-.203
5.00	.095	-.011	-.060	-.052	-.140	-.163	-.189
7.50	.069	-.028	-.070	-.091	-.163	-.177	-.218
10.00	.056	-.037	-.087	-.106	-.178	-.195	-.236
15.00	.024	-.069	-.108	-.157	-.191	-.205	-.273
20.00	.020	-.077	-.135	-.178	-.206	-.238	-.313
25.00	.007	-.094	-.153	-.195	-.233	-.254	-.345
30.00	-.050	-.114	-.178	-.213	-.258	-.282	-.361
35.00	-.073	-.141	-.194	-.243	-.272	-.309	-.368
40.00	-.073	-.157	-.221	-.268	-.293	-.331	-.384
45.00	-.102	-.185	-.245	-.295	-.328	-.364	-.414
50.0C	-.132	-.213	-.276	-.325	-.348	-.389	-.433
55.00	-.156	-.224	-.278	-.329	-.370	-.432	-.461
60.00	-.166	-.233	-.278	-.331	-.367	-.460	-.459
65.00	-.188	-.232	-.285	-.325	-.344	-.419	-.306
70.00	-.183						-.204
75.00	-.199	-.242	-.290	-.302	-.159	-.181	-.102
80.00	-.179	-.230	-.257	-.173	-.109	-.125	-.053
85.00	-.224	-.225	-.197	-.096	-.069	-.083	-.004
90.00	-.212	-.211	-.117	-.042	-.034	-.040	-.046
95.00	-.262	-.129	-.042	.004	-.004	.003	.082

TABLE I   BASIC WING

M = 1.03   α = 3.9°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.054	-.358	-.250	-.497	-.116	-.105	-.200
1.25	-.113	-.681	-.741	-.698	-.703	-.752	-.789
2.50	-.028	-.602	-.696	-.750	-.746	-.778	-.776
5.00	-.054	-.226	-.570	-.681	-.684	-.695	-.670
7.50	-.092	-.232	-.274	-.529	-.636	-.668	-.670
10.00	-.102	-.226	-.281	-.337	-.593	-.646	-.667
15.00	-.120	-.218	-.285	-.318	-.352	-.606	-.646
20.00	-.122	-.216	-.278	-.322	-.345	-.443	-.628
25.00	-.150	-.222	-.286	-.342	-.380	-.383	-.488
30.00	-.164	-.226	-.297	-.352	-.396	-.422	-.387
35.00	-.161	-.238	-.314	-.365	-.413	-.447	-.403
40.00	-.172	-.261	-.332	-.383	-.430	-.469	-.428
45.00	-.193	-.273	-.349	-.403	-.446	-.493	-.465
50.00	-.224	-.296	-.370	-.424	-.471	-.516	-.491
55.00	-.207	-.315	-.383	-.447	-.505	-.555	-.521
60.00	-.237	-.328	-.390	-.396	-.520	-.578	-.528
65.00	-.278	-.303	-.369	-.432	-.506	-.551	-.527
70.00	-.248						-.345
75.00	-.209	-.339	-.396	-.423	-.333	-.221	-.177
80.00	-.294	-.325	-.344	-.250	-.199	-.152	-.128
85.00	-.304	-.318	-.215	-.144	-.135	-.110	-.086
90.00	-.307	-.258	-.115	-.083	-.088	-.070	-.044
95.00	-.283	-.132	-.055	-.062	-.056	-.037	-.009
LOWER SURFACE							
1.25	.320	.361	.344	.300	.329		.307
2.50	.330	.299	.276	.253	.257	.272	.235
5.00	.285	.233	.204	.231	.176	.174	.152
7.50	.262	.194	.161	.172	.123	.123	.077
10.00	.238	.167	.127	.128	.086	.087	.035
15.00	.198	.111	.088	.053	.057	.045	-.052
20.00	.145	.083	.043	.022	.010	.004	-.124
25.00	.155	.050	.010	-.006	-.027	-.041	-.207
30.00	.095	.019	-.022	-.035	-.056	-.076	-.252
35.00	.059	-.007	-.048	-.065	-.083	-.106	-.287
40.00	.049	-.029	-.075	-.086	-.106	-.127	-.302
45.00	.018	-.061	-.097	-.111	-.137	-.144	-.311
50.00	-.015	-.087	-.125	-.135	-.155	-.173	-.329
55.00	-.041	-.100	-.130	-.143	-.163	-.204	-.329
60.00	-.061	-.109	-.133	-.146	-.144	-.226	-.316
65.00	-.072	-.123	-.140	-.150	-.137	-.236	-.301
70.00	-.072						-.290
75.00	-.100	-.123	-.135	-.101	-.083	-.226	-.256
80.00	-.079	-.107	-.111	-.073	-.075	-.185	-.187
85.00	-.107	-.113	-.083	-.050	-.060	-.164	-.136
90.00	-.115	-.111	-.056	-.036	-.056	-.130	-.093
95.00	-.133	-.084	-.021	-.012	-.050	-.074	-.032

M = 1.03   α = 5.9°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.066	-.183	-.074	-.378	-.105	-.134	-.040
1.25	-.060	-.855	-.896	-.861	-.874	-.886	-.925
2.50	-.035	-.812	-.875	-.912	-.906	-.932	-.921
5.00	-.126	-.676	-.829	-.850	-.855	-.847	-.827
7.50	-.167	-.375	-.741	-.789	-.815	-.830	-.822
10.00	-.177	-.326	-.709	-.733	-.797	-.806	-.817
15.00	-.191	-.294	-.428	-.709	-.731	-.793	-.802
20.00	-.185	-.287	-.314	-.572	-.718	-.759	-.791
25.00	-.207	-.286	-.334	-.377	-.716	-.735	-.745
30.00	-.216	-.284	-.346	-.374	-.600	-.732	-.686
35.00	-.212	-.292	-.358	-.395	-.460	-.721	-.682
40.00	-.220	-.309	-.374	-.420	-.442	-.714	-.684
45.00	-.239	-.321	-.395	-.442	-.467	-.654	-.694
50.00	-.269	-.340	-.416	-.464	-.498	-.577	-.699
55.00	-.247	-.359	-.427	-.493	-.534	-.564	-.694
60.00	-.278	-.371	-.438	-.439	-.556	-.578	-.635
65.00	-.319	-.346	-.422	-.490	-.555	-.573	-.508
70.00	-.289						-.432
75.00	-.242	-.378	-.436	-.473	-.442	-.244	-.331
80.00	-.335	-.366	-.384	-.301	-.248	-.183	-.310
85.00	-.339	-.355	-.233	-.175	-.176	-.147	-.253
90.00	-.339	-.276	-.133	-.110	-.125	-.108	-.203
95.00	-.326	-.136	-.073	-.073	-.089	-.073	-.135
LOWER SURFACE							
1.25	.376	.481	.454	.417	.426		.406
2.50	.411	.414	.382	.350	.354	.358	.333
5.00	.389	.346	.303	.323	.270	.265	.250
7.50	.373	.294	.257	.264	.216	.210	.178
10.00	.342	.262	.226	.206	.175	.174	.130
15.00	.297	.199	.176	.144	.139	.124	.034
20.00	.238	.162	.127	.106	.087	.075	-.065
25.00	.238	.129	.092	.070	.050	.035	-.141
30.00	.177	.095	.056	.042	.019	.002	-.201
35.00	.136	.070	.032	.009	-.013	-.032	-.243
40.00	.125	.047	-.003	-.017	-.040	-.056	-.263
45.00	.089	.012	-.026	-.038	-.071	-.091	-.286
50.00	.054	-.017	-.049	-.055	-.088	-.130	-.306
55.00	.029	-.026	-.060	-.068	-.097	-.162	-.317
60.00	.008	-.044	-.064	-.085	-.095	-.191	-.314
65.00	-.006	-.058	-.072	-.095	-.086	-.208	-.311
70.00	-.009						-.304
75.00	-.063	-.063	-.074	-.077	-.066	-.219	-.290
80.00	-.033	-.047	-.062	-.058	-.065	-.184	-.241
85.00	-.054	-.054	-.053	-.042	-.060	-.173	-.196
90.00	-.069	-.058	-.044	-.038	-.059	-.160	-.143
95.00	-.061	-.055	-.023	-.017	-.065	-.098	-.096

TABLE I   BASIC WING

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.03   α = 7.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.106	-.019	-.094	-.211	-.318	-.368	-.319
1.25	-.002	-1.001	-1.038	-1.005	-1.032	-1.008	-1.062
2.50	-.104	-.972	-.991	-1.043	-1.046	-1.056	-1.056
5.00	-.212	-.922	-.987	-.990	-.998	-.971	-.981
7.50	-.252	-.801	-.921	-.948	-.957	-.966	-.968
10.00	-.258	-.584	-.911	-.910	-.939	-.939	-.953
15.00	-.273	-.415	-.860	-.878	-.903	-.921	-.935
20.00	-.257	-.368	-.683	-.847	-.879	-.894	-.915
25.00	-.275	-.352	-.456	-.839	-.869	-.862	-.869
30.00	-.277	-.344	-.399	-.767	-.854	-.876	-.831
35.00	-.270	-.349	-.396	-.575	-.838	-.869	-.825
40.00	-.274	-.359	-.410	-.495	-.829	-.866	-.824
45.00	-.289	-.370	-.427	-.480	-.810	-.869	-.835
50.00	-.319	-.389	-.450	-.487	-.728	-.867	-.841
55.00	-.292	-.403	-.461	-.513	-.635	-.886	-.811
60.00	-.327	-.412	-.474	-.462	-.599	-.863	-.518
65.00	-.364	-.391	-.465	-.523	-.577	-.550	-.529
70.00	-.335						-.587
75.00	-.284	-.418	-.473	-.521	-.406	-.521	-.643
80.00	-.383	-.407	-.423	-.353	-.305	-.548	-.649
85.00	-.384	-.397	-.269	-.218	-.252	-.543	-.644
90.00	-.378	-.313	-.162	-.146	-.205	-.473	-.627
95.00	-.369	-.164	-.096	-.112	-.167	-.336	-.601

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.409	.573	.534	.495	.490		.465
2.50	.484	.508	.469	.423	.427	.428	.400
5.00	.489	.436	.395	.383	.351	.341	.319
7.50	.483	.383	.347	.331	.296	.289	.246
10.00	.450	.354	.313	.280	.256	.245	.198
15.00	.396	.285	.260	.225	.210	.199	.109
20.00	.329	.243	.208	.182	.157	.146	.014
25.00	.318	.206	.170	.143	.116	.102	-.081
30.00	.256	.171	.134	.116	.084	.070	-.146
35.00	.213	.142	.103	.083	.053	.031	-.190
40.00	.196	.114	.072	.056	.023	.000	-.224
45.00	.161	.082	.049	.022	-.006	-.040	-.258
50.00	.133	.051	.029	-.003	-.023	-.080	-.282
55.00	.095	.036	.017	-.026	-.040	-.117	-.297
60.00	.069	.019	.012	-.033	-.045	-.147	-.302
65.00	.063	.009	.001	-.041	-.043	-.167	-.305
70.00	.041						-.304
75.00	-.024	-.003	-.038	-.045	-.040	-.195	-.304
80.00	.013	.020	-.036	-.034	-.051	-.179	-.263
85.00	-.012	-.002	-.031	-.029	-.053	-.177	-.232
90.00	-.035	-.023	-.031	-.031	-.068	-.177	-.202
95.00	-.026	-.042	-.020	-.022	-.083	-.070	-.216

M = 1.03   α = 11.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.174	-.383	-.408	-.026	-.638	-.741	-.678
1.25	-.114	-1.026	-1.061	-1.148	-1.162	-1.099	-1.028
2.50	-.238	-1.014	-1.012	-1.157	-1.167	-1.122	-1.015
5.00	-.389	-1.038	-1.040	-1.123	-1.142	-1.069	-.972
7.50	-.425	-1.007	-.952	-1.092	-1.115	-1.082	-.386
10.00	-.433	-.952	-.893	-1.063	-1.096	-1.068	-.992
15.00	-.440	-.866	-.823	-1.016	-1.065	-1.047	-.941
20.00	-.400	-.816	-.765	-.958	-1.035	-1.024	-.910
25.00	-.393	-.767	-.726	-.936	-1.020	-.976	-.893
30.00	-.381	-.684	-.701	-.887	-1.002	-.981	-.836
35.00	-.365	-.549	-.681	-.819	-.994	-.953	-.790
40.00	-.358	-.407	-.669	-.774	-.986	-.873	-.755
45.00	-.363	-.370	-.659	-.753	-.940	-.768	-.736
50.00	-.387	-.399	-.653	-.738	-.803	-.725	-.734
55.00	-.363	-.426	-.636	-.713	-.733	-.708	-.725
60.00	-.395	-.450	-.638	-.672	-.722	-.697	-.713
65.00	-.432	-.445	-.635	-.614	-.715	-.678	-.690
70.00	-.408						-.159
75.00	-.367	-.468	-.601	-.490	-.723	-.661	-.658
80.00	-.450	-.465	-.530	-.433	-.728	-.645	-.632
85.00	-.447	-.460	-.432	-.366	-.707	-.620	-.604
90.00	-.445	-.402	-.359	-.306	-.669	-.591	-.582
95.00	-.433	-.208	-.304	-.261	-.601	-.559	-.562

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.431	.672	.605	.595	.542		.499
2.50	.563	.634	.576	.536	.516	.512	.472
5.00	.628	.575	.515	.504	.453	.438	.398
7.50	.645	.525	.470	.449	.403	.391	.327
10.00	.610	.489	.435	.390	.366	.338	.282
15.00	.552	.422	.381	.340	.314	.298	.199
20.00	.476	.374	.328	.299	.266	.245	.089
25.00	.448	.331	.285	.254	.222	.196	.009
30.00	.384	.293	.248	.222	.186	.156	-.065
35.00	.338	.259	.217	.186	.153	.111	-.117
40.00	.313	.230	.185	.153	.121	.071	-.165
45.00	.275	.191	.157	.118	.087	.028	-.199
50.00	.243	.161	.129	.089	.061	-.023	-.232
55.00	.206	.140	.110	.067	.030	-.064	-.254
60.00	.176	.121	.094	.053	.011	-.102	-.266
65.00	.168	.109	.072	.039	-.004	-.129	-.272
70.00	.137						-.282
75.00	.072	.089	.028	.006	-.028	-.175	-.285
80.00	.089	.084	.022	-.007	-.057	-.187	-.285
85.00	.059	.047	.023	-.024	-.077	-.223	-.306
90.00	.021	.013	.007	-.060	-.112	-.252	-.318
95.00	.012	-.029	-.019	-.092	-.139	-.289	-.345

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.60 α = 0.0°

SURFACE	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	-.233	.476	.451	.687	.437	.435	.330
	1.25	.354	-.080	-.029	.039	.171	.189	.154
	2.50	.083	-.066	-.027	.016	.077	.085	.103
	5.00	.021	-.069	-.034	.004	.061	.089	.048
	7.50	-.009	-.075	-.031	.010	.033	.055	.016
	10.00	-.021	-.084	-.052	.005	.015	.040	-.016
	15.00	-.046	-.082	-.054	-.011	.013	.014	-.030
	20.00	-.059	-.087	-.051	-.009	.009	.016	-.045
	25.00	-.075	-.087	-.042	-.002	.008	.019	-.033
	30.00	-.086	-.081	-.032	.010	.019	.019	-.042
	35.00	-.079	-.062	-.009	.033	.042	.033	-.040
	40.00	-.083	-.039	.028	.054	.072	.054	-.041
	45.00	-.080	-.006	.068	.095	.108	.084	-.033
	50.00	-.072	.076	.133	.151	.162	.129	-.034
	55.00	-.018	.184	.225	.230	.240	.194	-.042
	60.00	.070	.272	.312	.317	.320	.254	-.038
	65.00	.277	.266	.319	.317	.315	.246	-.035
	70.00	.523	.230	.328	.325	.364	.228	-.042
	75.00	-1.514	-.834	-.389	-.336	-.269	-.174	-.040
	80.00	-.606	-1.015	-.413	-.346	-.268	-.164	-.047
	85.00	-.275	-.918	-.443	-.352	-.267	-.153	-.068
	90.00	-.036	-.659	-.451	-.361	-.271	-.138	-.081
	95.00	-.022	-.297	-.414	-.339	-.263	-.138	-.079
LOWER SURFACE	1.25	-.126	-.127	-.188	-.236	-.364	-.448	-.467
	2.50	-.068	-.094	-.135	-.172	-.255	-.292	-.324
	5.00	-.028	-.091	-.120	-.106	-.218	-.255	-.252
	7.50	-.010	-.105	-.133	-.133	-.210	-.235	-.246
	10.00	-.033	-.111	-.139	-.149	-.204	-.183	-.238
	15.00	-.060	-.130	-.158	-.174	-.191	-.208	-.216
	20.00	-.098	-.146	-.164	-.176	-.202	-.215	-.205
	25.00	-.074	-.152	-.169	-.183	-.212	-.216	-.178
	30.00	-.125	-.164	-.174	-.184	-.213	-.217	-.171
	35.00	-.135	-.176	-.179	-.197	-.216	-.222	-.171
	40.00	-.141	-.179	-.188	-.200	-.222	-.222	-.175
	45.00	-.156	-.184	-.190	-.206	-.225	-.218	-.163
	50.00	-.175	-.190	-.191	-.208	-.225	-.218	-.156
	55.00	-.177	-.180	-.183	-.205	-.222	-.214	-.144
	60.00	-.179	-.172	-.155	-.196	-.214	-.197	-.133
	65.00	-.178	-.158	-.159	-.186	-.199	-.178	-.116
	70.00	-.165						-.117
	75.00	-.159	-.108	-.124	-.177	-.181	-.120	-.099
	80.00	-.141	-.091	-.142	-.158	-.169	-.120	-.087
	85.00	-.130	-.072	-.151	-.151	-.164	-.122	-.083
	90.00	-.094	-.031	-.157	-.161	-.134	-.127	-.063
	95.00	-.065	.003	-.167	-.178	-.176	-.121	-.061

M = 0.60 α = 4.0°

SURFACE	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	-.160	-.151	-.251	-.071	-.358	-.238	-.060
	1.25	-.142	-.964	-1.042	-.920	-.857	-.866	-.684
	2.50	-.214	-.553	-.570	-.603	-.567	-.544	-.456
	5.00	-.244	-.419	-.426	-.416	-.338	-.313	-.310
	7.50	-.249	-.363	-.350	-.333	-.296	-.266	-.267
	10.00	-.238	-.336	-.321	-.291	-.276	-.232	-.229
	15.00	-.238	-.291	-.271	-.242	-.202	-.196	-.160
	20.00	-.231	-.265	-.230	-.200	-.169	-.149	-.141
	25.00	-.231	-.244	-.194	-.165	-.133	-.110	-.110
	30.00	-.230	-.217	-.163	-.131	-.103	-.087	-.088
	35.00	-.209	-.183	-.121	-.068	-.067	-.047	-.077
	40.00	-.203	-.143	-.071	-.045	-.012	-.008	-.063
	45.00	-.188	-.076	-.014	.015	.046	.049	-.057
	50.00	-.171	.013	.066	.083	.112	.111	-.044
	55.00	-.094	.120	.134	.143	.175	.155	-.038
	60.00	-.008	.155	.155	.187	.186	.164	-.026
	65.00	.201	.157	.152	.175	.180	.147	-.027
	70.00	.431	.097	.160	.188	.194	.144	-.028
	75.00	-1.390	-.764	-.387	-.329	-.247	-.155	-.030
	80.00	-.779	-.889	-.398	-.330	-.248	-.144	-.036
	85.00	-.362	-.837	-.419	-.342	-.243	-.136	-.038
	90.00	-.166	-.693	-.428	-.353	-.247	-.128	-.042
	95.00	-.045	-.473	-.405	-.340	-.258	-.121	-.035
LOWER SURFACE	1.25	.303	.346	.363	.331	.341	.330	.256
	2.50	.270	.264	.270	.257	.257	.246	.175
	5.00	.222	.186	.179	.191	.168	.147	.097
	7.50	.179	.140	.138	.140	.116	.101	.033
	10.00	.146	.107	.099	.099	.075	.090	.015
	15.00	.115	.062	.062	.043	.041	.028	-.067
	20.00	.065	.030	.019	.007	.003	.021	-.087
	25.00	.062	.000	-.016	-.027	-.038	-.049	-.090
	30.00	.016	-.023	-.037	-.048	-.056	-.074	-.107
	35.00	-.007	-.050	-.059	-.071	-.076	-.092	-.110
	40.00	-.022	-.058	-.074	-.088	-.094	-.110	-.121
	45.00	-.045	-.079	-.086	-.107	-.110	-.127	-.119
	50.00	-.072	-.091	-.102	-.121	-.126	-.134	-.123
	55.00	-.079	-.093	-.106	-.128	-.136	-.146	-.117
	60.00	-.087	-.090	-.090	-.129	-.136	-.142	-.101
	65.00	-.096	-.094	-.106	-.134	-.134	-.133	-.099
	70.00	-.085						-.094
	75.00	-.093	-.062	-.134	-.139	-.132	-.080	-.070
	80.00	-.083	-.056	-.115	-.128	-.131	-.088	-.065
	85.00	-.083	-.045	-.117	-.130	-.132	-.088	-.064
	90.00	-.065	-.039	-.144	-.146	-.104	-.097	-.041
	95.00	-.065	-.042	-.154	-.170	-.158	-.096	-.028

TABLE II　　　　　WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.60　α = 6.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.138	-.852	-.743	-.331	-1.080	-.834	-.739
1.25	-.337	-1.463	-.877	-.758	-1.023	-.817	-.927
2.50	-.400	-.912	-.807	-.716	-.903	-.650	-.686
5.00	-.404	-.676	-.723	-.657	-.705	-.560	-.538
7.50	-.393	-.570	-.622	-.588	-.595	-.499	-.454
10.00	-.364	-.508	-.570	-.527	-.497	-.444	-.353
15.00	-.345	-.422	-.463	-.433	-.357	-.350	-.235
20.00	-.325	-.370	-.369	-.352	-.278	-.272	-.174
25.00	-.314	-.330	-.305	-.285	-.214	-.201	-.132
30.00	-.307	-.289	-.248	-.227	-.165	-.153	-.108
35.00	-.276	-.248	-.196	-.177	-.119	-.097	-.087
40.00	-.263	-.198	-.137	-.126	-.066	-.052	-.064
45.00	-.245	-.126	-.080	-.066	-.014	-.004	-.047
50.00	-.224	-.036	-.015	-.011	-.034	-.043	-.040
55.00	-.135	-.065	-.058	-.046	-.084	-.086	-.040
60.00	-.039	-.099	-.105	-.115	-.120	-.112	-.044
65.00	-.173	-.088	-.115	-.110	-.135	-.116	-.048
70.00	-.418	-.034	-.130	-.130	-.170	-.116	-.058
75.00	-1.273	-.721	-.380	-.314	-.255	-.155	-.065
80.00	-.919	-.829	-.396	-.318	-.259	-.146	-.070
85.00	-.435	-.775	-.410	-.332	-.267	-.134	-.070
90.00	-.213	-.669	-.419	-.331	-.270	-.126	-.077
95.00	-.094	-.512	-.392	-.312	-.261	-.121	-.068

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.360	.450	.447	.426	.440	.437	.387
2.50	.340	.381	.376	.363	.374	.370	.303
5.00	.302	.298	.288	.296	.288	.259	.205
7.50	.276	.244	.230	.248	.221	.208	.134
10.00	.243	.203	.195	.197	.184	.197	.071
15.00	.200	.148	.149	.130	.129	.124	.014
20.00	.147	.107	.096	.089	.081	.067	.007
25.00	.140	.070	.060	.049	.043	.023	-.055
30.00	.091	.044	.032	.026	.012	.008	-.077
35.00	.061	.017	.008	-.006	-.018	-.037	-.081
40.00	.043	-.001	-.017	-.027	-.035	-.059	-.101
45.00	.014	-.025	-.035	-.051	-.063	-.083	-.097
50.00	-.013	-.041	-.054	-.069	-.079	-.101	-.100
55.00	-.026	-.047	-.062	-.087	-.092	-.111	-.100
60.00	-.035	-.047	-.052	-.093	-.095	-.113	-.089
65.00	-.051	-.050	-.075	-.094	-.099	-.108	-.082
70.00	-.043						-.084
75.00	-.056	-.037	-.090	-.108	-.103	-.066	-.062
80.00	-.049	-.039	-.092	-.102	-.104	-.074	-.062
85.00	-.055	-.025	-.102	-.106	-.107	-.082	-.064
90.00	-.045	-.037	-.124	-.121	-.084	-.092	-.042
95.00	-.035	-.069	-.137	-.146	-.134	-.093	-.042

M = 0.60　α = 8.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.127	-1.176	-1.101	-.689	-1.337	-.914	-.987
1.25	-.575	-1.129	-.931	-1.090	-.983	-.667	-.814
2.50	-.618	-1.069	-.894	-.999	-.985	-.650	-.786
5.00	-.596	-.987	-.847	-.900	-.920	-.611	-.740
7.50	-.566	-.875	-.782	-.760	-.872	-.596	-.714
10.00	-.520	-.776	-.739	-.655	-.824	-.564	-.655
15.00	-.473	-.645	-.639	-.550	-.640	-.517	-.551
20.00	-.435	-.552	-.544	-.493	-.460	-.443	-.436
25.00	-.411	-.470	-.479	-.447	-.353	-.387	-.323
30.00	-.397	-.407	-.409	-.387	-.286	-.344	-.236
35.00	-.357	-.345	-.343	-.335	-.237	-.297	-.186
40.00	-.337	-.286	-.277	-.280	-.194	-.236	-.137
45.00	-.313	-.221	-.219	-.230	-.159	-.179	-.113
50.00	-.286	-.148	-.156	-.176	-.111	-.122	-.094
55.00	-.187	-.057	-.087	-.132	-.080	-.072	-.094
60.00	-.078	-.007	-.063	-.087	-.056	-.036	-.094
65.00	-.116	-.043	-.066	-.105	-.037	-.049	-.094
70.00	-.385	-.069	-.007	-.036	-.029	-.018	-.106
75.00	-1.193	-.675	-.398	-.337	-.292	-.194	-.106
80.00	-.933	-.768	-.430	-.351	-.302	-.179	-.105
85.00	-.535	-.696	-.410	-.324	-.291	-.160	-.095
90.00	-.274	-.566	-.372	-.280	-.263	-.137	-.099
95.00	-.160	-.431	-.324	-.253	-.239	-.127	-.089

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.374	.484	.466	.473	.461	.459	.431
2.50	.367	.444	.425	.434	.436	.428	.374
5.00	.371	.370	.359	.383	.365	.340	.285
7.50	.366	.321	.310	.326	.304	.278	.204
10.00	.327	.278	.272	.279	.265	.268	.138
15.00	.287	.218	.215	.203	.211	.182	.065
20.00	.227	.174	.162	.152	.158	.129	.014
25.00	.210	.130	.120	.113	.110	.079	-.009
30.00	.155	.101	.087	.074	.080	.047	-.038
35.00	.121	.070	.060	.054	.050	.009	-.052
40.00	.099	.049	.027	.023	.023	-.019	-.071
45.00	.070	.023	.011	.002	-.004	-.046	-.068
50.00	.042	.003	-.008	-.018	-.023	-.060	-.069
55.00	.022	-.005	-.019	-.033	-.040	-.082	-.068
60.00	.005	-.011	-.014	-.045	-.049	-.086	-.063
65.00	-.006	-.023	-.045	-.052	-.052	-.083	-.061
70.00	-.001						-.062
75.00	-.023	-.008	-.069	-.069	-.062	-.066	-.044
80.00	-.012	-.020	-.066	-.065	-.070	-.072	-.044
85.00	-.020	-.020	-.071	-.069	-.072	-.072	-.048
90.00	-.024	-.028	-.097	-.087	-.056	-.089	-.043
95.00	-.012	-.063	-.103	-.106	-.104	-.087	-.044

TABLE II WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.60 α = 11.3°

UPPER SURFACE

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.034	-1.770	-1.529	-1.124	-.726	-.470	-.416
1.25	-1.063	-1.393	-1.100	-.957	-.675	-.439	-.327
2.50	-1.134	-1.422	-1.079	-.964	-.675	-.434	-.330
5.00	-1.079	-1.455	-1.098	-.969	-.670	-.421	-.314
7.50	-.980	-1.533	-1.073	-.971	-.666	-.425	-.306
10.00	-.865	-1.640	-1.070	-.965	-.661	-.420	-.303
15.00	-.737	-1.582	-1.040	-.954	-.652	-.408	-.293
20.00	-.650	-1.390	-1.007	-.944	-.642	-.395	-.281
25.00	-.596	-1.065	-.976	-.930	-.635	-.377	-.278
30.00	-.571	-.658	-.934	-.899	-.627	-.372	-.278
35.00	-.519	-.358	-.892	-.863	-.616	-.360	-.254
40.00	-.478	-.234	-.839	-.820	-.603	-.345	-.268
45.00	-.429	-.175	-.772	-.771	-.585	-.333	-.262
50.00	-.376	-.117	-.697	-.714	-.562	-.321	-.249
55.00	-.262	-.016	-.604	-.654	-.535	-.309	-.232
60.00	-.141	.074	-.531	-.560	-.502	-.297	-.215
65.00	-.002	.060	-.485	-.535	-.466	-.285	-.200
70.00	.305	.001	-.387	-.482	-.411	-.274	-.004
75.00	-1.130	-.678	-.471	-.442	-.412	-.277	-.183
80.00	-.905	-.738	-.442	-.463	-.439	-.271	-.182
85.00	-.606	-.682	-.339	-.440	-.435	-.268	-.173
90.00	-.372	-.554	-.261	-.383	-.403	-.250	-.176
95.00	-.234	-.390	-.197	-.344	-.375	-.245	-.169

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.366	.487	.461	.501	.476	.477	.411
2.50	.382	.524	.504	.502	.491	.477	.378
5.00	.534	.490	.467	.470	.438	.403	.310
7.50	.494	.446	.425	.429	.390	.351	.237
10.00	.465	.405	.390	.382	.348	.335	.176
15.00	.433	.328	.328	.312	.288	.250	.120
20.00	.364	.287	.276	.260	.240	.194	.046
25.00	.331	.243	.232	.221	.194	.146	.012
30.00	.285	.205	.197	.185	.152	.100	-.014
35.00	.236	.172	.171	.149	.115	.060	-.031
40.00	.214	.145	.135	.122	.091	.028	-.056
45.00	.174	.110	.112	.091	.055	-.002	-.070
50.00	.128	.089	.081	.067	.032	-.030	-.081
55.00	.127	.069	.070	.045	.005	-.052	-.087
60.00	.095	.055	.059	.032	-.014	-.067	-.084
65.00	.084	.052	.043	.021	-.023	-.073	-.077
70.00	.070						-.083
75.00	.033	.042	.013	-.019	-.062	-.061	-.081
80.00	.039	.021	-.020	-.016	-.074	-.082	-.075
85.00	.041	-.005	-.013	-.023	-.099	-.108	-.087
90.00	.017	-.002	-.005	-.055	-.097	-.124	-.090
95.00	.013	-.035	-.002	-.091	-.170	-.146	-.104

M = 0.60 α = 15.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.088	-2.006	-1.203	-.642	-.526	-.462	-.457
1.25	-1.570	-1.964	-1.167	-.763	-.518	-.446	-.395
2.50	-1.809	-1.948	-1.167	-.759	-.516	-.448	-.394
5.00	-1.866	-1.946	-1.194	-.754	-.524	-.443	-.398
7.50	-1.594	-1.994	-1.184	-.754	-.522	-.450	-.387
10.00	-1.274	-2.070	-1.182	-.745	-.525	-.451	-.383
15.00	-1.053	-2.025	-1.163	-.734	-.524	-.452	-.381
20.00	-.941	-1.939	-1.157	-.721	-.525	-.451	-.382
25.00	-.770	-1.751	-1.164	-.716	-.519	-.442	-.380
30.00	-.681	-1.433	-1.166	-.714	-.515	-.446	-.373
35.00	-.618	-1.058	-1.156	-.703	-.507	-.437	-.367
40.00	-.580	-.739	-1.129	-.686	-.498	-.429	-.357
45.00	-.534	-.518	-1.073	-.673	-.492	-.421	-.351
50.00	-.472	-.362	-1.015	-.657	-.484	-.409	-.340
55.00	-.362	-.238	-.947	-.605	-.482	-.403	-.336
60.00	-.266	-.190	-.872	-.623	-.479	-.407	-.321
65.00	-.205	-.253	-.841	-.560	-.467	-.405	-.320
70.00	-.025	-.198	-.849	-.534	-.435	-.393	-.001
75.00	-1.179	-.616	-.657	-.551	-.426	-.343	-.309
80.00	-.731	-.687	-.665	-.564	-.434	-.344	-.302
85.00	-.496	-.617	-.610	-.543	-.429	-.338	-.290
90.00	-.368	-.445	-.565	-.543	-.418	-.325	-.280
95.00	-.247	-.246	-.529	-.529	-.404	-.319	-.265

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.257	.435	.396	.476	.445	.430	.397
2.50	.317	.570	.589	.528	.502	.480	.400
5.00	.530	.583	.540	.523	.477	.436	.352
7.50	.613	.555	.510	.492	.436	.392	.283
10.00	.593	.526	.480	.448	.401	.377	.227
15.00	.569	.456	.429	.388	.343	.297	.155
20.00	.497	.417	.371	.339	.289	.235	.080
25.00	.458	.366	.324	.294	.242	.184	.042
30.00	.411	.324	.286	.250	.202	.140	.000
35.00	.359	.288	.248	.211	.158	.092	-.030
40.00	.330	.257	.213	.173	.121	.051	-.060
45.00	.291	.223	.180	.135	.079	.008	-.072
50.00	.236	.189	.151	.102	.041	-.022	-.087
55.00	.220	.169	.127	.070	.006	-.056	-.101
60.00	.195	.146	.108	.039	-.017	-.074	-.107
65.00	.170	.128	.076	.014	-.038	-.093	-.114
70.00	.146						-.123
75.00	.106	.111	.034	-.062	-.090	-.093	-.123
80.00	.107	.087	-.014	-.076	-.115	-.112	-.128
85.00	.108	.077	-.011	-.104	-.146	-.147	-.139
90.00	.061	.059	-.059	-.164	-.146	-.175	-.144
95.00	.049	.040	-.129	-.237	-.232	-.201	-.167

TABLE II — WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT: 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 0.0°							
UPPER SURFACE							
.00	.177	.512	.478	.749	.476	.465	.366
1.25	.209	-.068	-.041	-.002	.161	.200	.173
2.50	.133	-.058	-.033	-.005	.066	.087	.123
5.00	.061	-.060	-.039	-.013	.054	.095	.062
7.50	.022	-.071	-.040	-.001	.025	.062	.032
10.00	.007	-.082	-.051	-.002	.009	.048	-.014
15.00	-.028	-.087	-.051	-.015	.011	.018	-.045
20.00	-.050	-.090	-.042	-.009	.011	.020	-.058
25.00	-.071	-.090	-.033	.000	.017	.023	-.044
30.00	-.087	-.080	-.019	.017	.031	.026	-.038
35.00	-.080	-.056	-.003	.039	.054	.042	-.034
40.00	-.086	-.013	-.037	.067	.083	.061	-.021
45.00	-.082	.055	.083	.112	.126	.095	-.039
50.00	-.067	.144	.156	.174	.185	.147	-.048
55.00	-.006	.251	.253	.260	.270	.224	-.062
60.00	.138	.277	.318	.347	.323	.266	-.049
65.00	.343	.277	.325	.333	.322	.240	-.049
70.00	.571	.229	.340	.349	.352	.236	-.053
75.00	-1.165	-.764	-.397	-.321	-.272	-.189	-.057
80.00	-.635	-.837	-.407	-.322	-.268	-.182	-.071
85.00	-.479	-.796	-.421	-.326	-.270	-.170	-.091
90.00	-.236	-.711	-.430	-.331	-.275	-.165	-.100
95.00	-.169	-.557	-.416	-.326	-.281	-.159	-.097
LOWER SURFACE							
1.25	-.179	-.102	-.168	-.219	-.370	-.478	-.560
2.50	-.119	-.075	-.123	-.183	-.267	-.329	-.416
5.00	-.068	-.076	-.121	-.110	-.229	-.279	-.303
7.50	-.021	-.095	-.134	-.144	-.233	-.271	-.315
10.00	-.003	-.105	-.145	-.170	-.233	-.212	-.321
15.00	-.040	-.129	-.169	-.211	-.218	-.250	-.273
20.00	-.086	-.147	-.183	-.216	-.240	-.266	-.251
25.00	-.064	-.164	-.200	-.223	-.247	-.273	-.221
30.00	-.126	-.183	-.218	-.231	-.257	-.277	-.212
35.00	-.136	-.200	-.226	-.242	-.270	-.288	-.207
40.00	-.147	-.208	-.242	-.253	-.276	-.280	-.209
45.00	-.172	-.229	-.249	-.263	-.292	-.276	-.202
50.00	-.204	-.243	-.253	-.268	-.285	-.263	-.191
55.00	-.208	-.237	-.242	-.265	-.285	-.254	-.178
60.00	-.221	-.231	-.225	-.260	-.273	-.239	-.156
65.00	-.233	-.219	-.208	-.255	-.251	-.207	-.136
70.00	-.211						-.124
75.00	-.216	-.180	-.216	-.241	-.223	-.146	-.110
80.00	-.207	-.155	-.202	-.221	-.205	-.132	-.104
85.00	-.195	-.136	-.205	-.211	-.197	-.128	-.096
90.00	-.167	-.103	-.216	-.214	-.148	-.137	-.076
95.00	-.138	-.107	-.225	-.227	-.205	-.135	-.076
M = 0.85 α = 4.0°							
UPPER SURFACE							
.00	.196	.110	.000	.251	-.123	.096	.043
1.25	-.020	-.930	-1.019	-1.006	-.917	-.882	-.826
2.50	-.123	-.729	-.833	-.812	-.784	-.726	-.677
5.00	-.186	-.400	-.463	-.437	-.382	-.331	-.347
7.50	-.207	-.371	-.395	-.358	-.344	-.302	-.319
10.00	-.207	-.346	-.354	-.310	-.308	-.264	-.271
15.00	-.222	-.313	-.288	-.260	-.234	-.217	-.167
20.00	-.230	-.290	-.231	-.211	-.179	-.168	-.136
25.00	-.241	-.269	-.190	-.173	-.145	-.121	-.101
30.00	-.245	-.235	-.157	-.130	-.103	-.086	-.076
35.00	-.230	-.184	-.112	-.082	-.055	-.040	-.059
40.00	-.225	-.114	-.063	-.035	-.001	.009	-.046
45.00	-.211	-.016	.002	.030	.054	.062	-.041
50.00	-.182	.093	.073	.092	.118	.111	-.039
55.00	-.071	.173	.136	.150	.165	.145	-.042
60.00	.050	.155	.155	.193	.186	.151	-.037
65.00	.259	.069	.157	.188	.190	.143	-.041
70.00	.457	.032	.174	.198	.206	.133	-.048
75.00	-1.038	-.721	-.405	-.320	-.251	-.173	-.046
80.00	-.743	-.753	-.412	-.322	-.247	-.164	-.048
85.00	-.621	-.711	-.426	-.328	-.248	-.154	-.055
90.00	-.407	-.638	-.437	-.332	-.251	-.150	-.060
95.00	-.241	-.538	-.420	-.329	-.252	-.146	-.053
LOWER SURFACE							
1.25	.328	.336	.347	.333	.337	.337	.274
2.50	.303	.264	.269	.259	.261	.258	.190
5.00	.259	.193	.182	.195	.168	.147	.105
7.50	.211	.142	.136	.143	.110	.096	.027
10.00	.180	.113	.098	.097	.075	.095	.024
15.00	.138	.066	.052	.040	.041	.013	-.105
20.00	.083	.031	.008	.001	.012	.034	-.132
25.00	.080	.001	-.023	-.037	-.046	-.072	-.135
30.00	.028	-.027	-.053	-.060	-.075	-.102	-.146
35.00	.003	-.052	-.078	-.085	-.101	-.138	-.153
40.00	-.014	-.072	-.099	-.107	-.121	-.164	-.157
45.00	-.041	-.096	-.115	-.131	-.148	-.183	-.155
50.00	-.076	-.115	-.131	-.147	-.160	-.196	-.152
55.00	-.085	-.117	-.135	-.159	-.175	-.199	-.144
60.00	-.099	-.121	-.133	-.163	-.178	-.194	-.126
65.00	-.115	-.123	-.135	-.167	-.178	-.177	-.113
70.00	-.105						-.105
75.00	-.117	-.109	-.164	-.178	-.172	-.128	-.086
80.00	-.117	-.107	-.154	-.167	-.169	-.121	-.078
85.00	-.124	-.102	-.168	-.165	-.164	-.104	-.066
90.00	-.109	-.110	-.185	-.177	-.127	-.127	-.051
95.00	-.117	-.153	-.198	-.199	-.182	-.123	-.038

TABLE II WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.85   α = 5.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.206	-.178	-.275	.109	-.530	-.444	-.368
1.25	-.139	-1.194	-1.134	-.779	-1.040	-.742	-.821
2.50	-.251	-1.169	-.895	-.724	-.869	-.628	-.798
5.00	-.321	-.768	-.765	-.665	-.732	-.574	-.726
7.50	-.338	-.574	-.665	-.607	-.636	-.544	-.683
10.00	-.326	-.491	-.600	-.551	-.566	-.499	-.639
15.00	-.331	-.441	-.482	-.473	-.452	-.435	-.447
20.00	-.329	-.420	-.372	-.386	-.338	-.358	-.275
25.00	-.336	-.381	-.300	-.315	-.249	-.288	-.151
30.00	-.331	-.327	-.239	-.251	-.190	-.225	-.095
35.00	-.317	-.253	-.183	-.194	-.134	-.167	-.054
40.00	-.312	-.169	-.130	-.143	-.080	-.108	-.049
45.00	-.286	-.072	-.075	-.091	-.031	-.054	-.042
50.00	-.247	.029	-.011	.038	.019	-.002	-.041
55.00	-.112	.119	-.048	.012	.057	.038	-.053
60.00	.015	.113	.080	.074	.095	.067	-.057
65.00	.227	.048	.083	.047	.115	.051	-.064
70.00	.434	.005	.111	.085	.158	.085	-.075
75.00	-1.012	-.716	-.404	-.338	-.287	-.191	-.078
80.00	-.771	-.741	-.419	-.347	-.293	-.183	-.078
85.00	-.645	-.701	-.434	-.357	-.296	-.176	-.078
90.00	-.443	-.638	-.439	-.350	-.289	-.163	-.075
95.00	-.295	-.545	-.413	-.338	-.265	-.149	-.068

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.378	.441	.438	.420	.429	.428	.386
2.50	.373	.366	.360	.344	.359	.355	.303
5.00	.337	.288	.276	.292	.264	.247	.207
7.50	.299	.234	.223	.241	.206	.189	.128
10.00	.263	.202	.186	.193	.162	.180	.069
15.00	.220	.143	.136	.116	.117	.095	-.031
20.00	.162	.102	.085	.074	.062	.039	-.072
25.00	.154	.067	.048	.034	.022	.004	-.106
30.00	.098	.032	.013	.008	-.008	-.038	-.123
35.00	.068	.011	-.011	-.023	-.040	-.078	-.128
40.00	.048	-.015	-.037	-.051	-.066	-.110	-.134
45.00	.018	-.040	-.060	-.077	-.092	-.136	-.134
50.00	-.014	-.063	-.081	-.096	-.112	-.158	-.130
55.00	-.031	-.071	-.089	-.115	-.130	-.167	-.126
60.00	-.049	-.077	-.093	-.122	-.135	-.163	-.108
65.00	-.063	-.084	-.100	-.130	-.137	-.154	-.098
70.00	-.059						-.093
75.00	-.076	-.077	-.130	-.147	-.139	-.128	-.068
80.00	-.076	-.086	-.134	-.140	-.141	-.102	-.068
85.00	-.092	-.095	-.139	-.142	-.145	-.091	-.063
90.00	-.083	-.109	-.162	-.157	-.104	-.110	-.046
95.00	-.111	-.145	-.181	-.176	-.159	-.109	-.041

M = 0.85   α = 8.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.204	-.493	-.543	-.070	-.843	-.797	-.785
1.25	-.277	-1.370	-.956	-.946	-1.008	-.693	-.829
2.50	-.407	-1.388	-.897	-.877	-.972	-.679	-.815
5.00	-.500	-1.243	-.859	-.823	-.943	-.645	-.805
7.50	-.522	-.842	-.774	-.781	-.922	-.631	-.801
10.00	-.499	-.735	-.733	-.750	-.896	-.610	-.788
15.00	-.484	-.647	-.668	-.696	-.772	-.572	-.717
20.00	-.452	-.600	-.589	-.661	-.567	-.533	-.624
25.00	-.447	-.531	-.518	-.637	-.438	-.492	-.500
30.00	-.433	-.424	-.456	-.585	-.365	-.462	-.372
35.00	-.441	-.323	-.389	-.507	-.323	-.420	-.260
40.00	-.448	-.243	-.320	-.407	-.280	-.378	-.183
45.00	-.391	-.157	-.259	-.300	-.243	-.324	-.155
50.00	-.319	-.068	-.201	-.215	-.201	-.271	-.140
55.00	-.170	-.016	-.142	-.149	-.166	-.225	-.140
60.00	-.036	-.023	-.118	-.078	-.129	-.186	-.140
65.00	-.173	-.073	-.122	-.105	-.089	-.178	-.144
70.00	-.381	-.075	-.062	-.035	-.012	-.107	-.147
75.00	-.977	-.716	-.420	-.350	-.313	-.241	-.143
80.00	-.796	-.727	-.451	-.366	-.317	-.228	-.137
85.00	-.683	-.682	-.443	-.342	-.288	-.193	-.128
90.00	-.531	-.617	-.412	-.305	-.257	-.162	-.120
95.00	-.399	-.529	-.370	-.263	-.227	-.143	-.109

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.403	.511	.492	.503	.475	.473	.433
2.50	.434	.452	.433	.409	.428	.428	.375
5.00	.414	.376	.356	.367	.348	.334	.285
7.50	.394	.320	.304	.314	.287	.277	.210
10.00	.356	.286	.258	.268	.248	.267	.143
15.00	.311	.218	.207	.191	.193	.179	.051
20.00	.243	.174	.158	.142	.138	.119	.020
25.00	.228	.138	.114	.102	.100	.075	-.063
30.00	.170	.104	.079	.071	.060	.033	-.093
35.00	.135	.069	.055	.036	.032	.010	-.104
40.00	.108	.044	.024	.006	.003	-.045	-.111
45.00	.077	.017	.001	-.025	-.025	-.079	-.114
50.00	.046	-.008	-.028	-.046	-.047	-.105	-.110
55.00	.023	-.018	-.041	-.063	-.069	-.122	-.104
60.00	-.001	-.034	-.048	-.074	-.081	-.128	-.091
65.00	-.011	-.043	-.059	-.089	-.081	-.121	-.083
70.00	-.012						-.078
75.00	-.038	-.046	-.111	-.105	-.090	-.083	-.060
80.00	-.033	-.062	-.099	-.101	-.091	-.083	-.059
85.00	-.055	-.088	-.107	-.106	-.096	-.082	-.057
90.00	-.060	-.100	-.128	-.123	-.066	-.089	-.049
95.00	-.107	-.149	-.140	-.133	-.120	-.088	-.055

TABLE II   WING WITH UPPER-SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.85   α = 11.3°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.170	-.886	-.990	-.535	-.730	-.459	-.457
1.25	-.450	-1.468	-1.135	-.975	-.658	-.424	-.359
2.50	-.614	-1.446	-1.090	-.970	-.654	-.422	-.360
5.00	-.735	-1.483	-1.108	-.956	-.650	-.410	-.359
7.50	-.769	-1.476	-1.080	-.963	-.642	-.418	-.353
10.00	-.749	-1.440	-1.054	-.957	-.636	-.412	-.351
15.00	-.723	-1.350	-.959	-.944	-.617	-.404	-.348
20.00	-.670	-1.298	-.862	-.934	-.599	-.395	-.345
25.00	-.641	-1.216	-.830	-.927	-.581	-.377	-.340
30.00	-.621	-.975	-.850	-.913	-.569	-.377	-.332
35.00	-.598	-.529	-.851	-.899	-.556	-.368	-.328
40.00	-.588	-.303	-.835	-.875	-.540	-.361	-.317
45.00	-.589	-.142	-.808	-.841	-.524	-.351	-.306
50.00	-.582	-.067	-.768	-.795	-.504	-.346	-.289
55.00	-.361	-.001	-.701	-.738	-.483	-.340	-.276
60.00	-.195	-.009	-.627	-.622	-.464	-.334	-.262
65.00	-.036	-.132	-.575	-.619	-.442	-.328	-.253
70.00	-.252	-.159	-.477	-.581	-.400	-.321	-.255
75.00	-.965	-.741	-.547	-.491	-.409	-.307	-.238
80.00	-.791	-.738	-.533	-.518	-.426	-.302	-.232
85.00	-.651	-.705	-.454	-.506	-.428	-.296	-.230
90.00	-.554	-.628	-.383	-.464	-.407	-.283	-.230
95.00	-.463	-.512	-.311	-.415	-.389	-.275	-.224

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.411	.568	.515	.522	.498	.489	.441
2.50	.484	.550	.509	.495	.489	.479	.402
5.00	.528	.491	.455	.466	.434	.409	.329
7.50	.551	.439	.410	.416	.386	.346	.259
10.00	.506	.407	.378	.369	.338	.337	.197
15.00	.461	.339	.318	.305	.288	.252	.099
20.00	.382	.292	.261	.251	.232	.193	.004
25.00	.355	.245	.223	.211	.188	.141	-.032
30.00	.302	.209	.185	.178	.146	.092	-.079
35.00	.248	.175	.156	.141	.113	.043	-.111
40.00	.227	.149	.120	.109	.078	.005	-.130
45.00	.191	.114	.092	.077	.041	-.038	-.142
50.00	.135	.085	.062	.048	.016	-.077	-.151
55.00	.133	.066	.047	.024	-.014	-.110	-.160
60.00	.100	.053	.027	.009	-.034	-.128	-.154
65.00	.088	.035	.007	-.008	-.054	-.146	-.152
70.00	.066						-.155
75.00	.022	.022	-.045	-.051	-.093	-.108	-.149
80.00	.031	-.007	-.029	-.042	-.114	-.134	-.158
85.00	.029	-.033	-.035	-.056	-.140	-.160	-.163
90.00	.005	-.062	-.051	-.090	-.140	-.191	-.162
95.00	-.009	-.125	-.064	-.137	-.223	-.201	-.176

M = 0.85   α = 15.5°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.055	-1.282	-1.085	-.910	-.559	-.495	-.491
1.25	-.640	-1.646	-1.035	-.766	-.555	-.484	-.454
2.50	-.862	-1.612	-1.009	-.759	-.560	-.491	-.449
5.00	-1.040	-1.617	-1.043	-.747	-.565	-.483	-.450
7.50	-1.065	-1.621	-1.042	-.739	-.569	-.493	-.446
10.00	-1.040	-1.598	-1.048	-.728	-.571	-.495	-.435
15.00	-1.010	-1.483	-1.038	-.700	-.573	-.495	-.429
20.00	-.929	-1.397	-1.016	-.688	-.573	-.492	-.429
25.00	-.866	-1.314	-.991	-.675	-.567	-.479	-.425
30.00	-.805	-1.257	-.979	-.664	-.562	-.485	-.434
35.00	-.717	-1.182	-.957	-.646	-.559	-.477	-.434
40.00	-.628	-1.082	-.935	-.630	-.555	-.473	-.431
45.00	-.579	-.953	-.898	-.615	-.548	-.466	-.427
50.00	-.603	-.800	-.863	-.607	-.538	-.462	-.420
55.00	-.544	-.680	-.827	-.601	-.527	-.463	-.411
60.00	-.420	-.644	-.800	-.544	-.521	-.476	-.401
65.00	-.318	-.702	-.820	-.596	-.526	-.495	-.403
70.00	-.096	-.525	-.775	-.557	-.493	-.479	-.008
75.00	-1.147	-.844	-.735	-.552	-.475	-.410	-.372
80.00	-.894	-.814	-.708	-.565	-.477	-.421	-.357
85.00	-.734	-.591	-.693	-.573	-.473	-.418	-.351
90.00	-.565	-.457	-.669	-.560	-.470	-.406	-.334
95.00	-.430	-.371	-.653	-.553	-.462	-.387	-.312

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.331	.575	.500	.563	.469	.449	.420
2.50	.476	.614	.556	.541	.504	.488	.420
5.00	.599	.592	.539	.532	.475	.443	.374
7.50	.698	.546	.504	.491	.433	.392	.314
10.00	.650	.520	.472	.447	.395	.383	.255
15.00	.597	.449	.423	.393	.346	.302	.160
20.00	.512	.404	.365	.342	.293	.242	.074
25.00	.478	.358	.325	.295	.244	.191	.005
30.00	.424	.318	.284	.254	.199	.136	-.055
35.00	.362	.278	.248	.212	.154	.082	-.106
40.00	.340	.243	.209	.174	.113	.037	-.136
45.00	.298	.207	.175	.134	.072	.014	-.155
50.00	.233	.174	.141	.095	.034	-.063	-.173
55.00	.233	.148	.116	.061	.005	-.105	-.187
60.00	.193	.127	.091	.032	-.036	-.138	-.190
65.00	.172	.099	.060	.004	-.066	-.174	-.213
70.00	.145						-.208
75.00	.087	.075	-.011	-.086	-.123	-.131	-.203
80.00	.088	.045	-.021	-.090	-.153	-.171	-.233
85.00	.088	-.015	-.058	-.127	-.189	-.218	-.228
90.00	.033	-.015	-.116	-.181	-.187	-.279	-.227
95.00	.007	-.062	-.194	-.244	-.287	-.286	-.242

CONFIDENTIAL

TABLE II

WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.90   α = 0.0°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.251	.522	.484	.754	.480	.477	.372
1.25	.221	-.071	-.056	-.001	.146	.203	.152
2.50	.147	-.061	-.045	-.009	.055	.073	.101
5.00	.074	-.061	-.044	-.009	.046	.092	.041
7.50	.034	-.074	-.046	-.010	.020	.057	.022
10.00	.014	-.084	-.051	-.005	.003	.042	-.036
15.00	-.022	-.093	-.049	-.027	-.007	.007	-.077
20.00	-.046	-.096	-.037	-.018	-.007	.012	-.087
25.00	-.070	-.096	-.026	-.009	-.015	.022	-.071
30.00	-.087	-.081	-.012	.004	-.030	.022	-.054
35.00	-.087	-.052	-.011	.030	.051	.035	-.044
40.00	-.088	-.003	.040	.058	.082	.058	-.036
45.00	-.086	.073	.085	.107	.124	.092	-.055
50.00	-.069	.170	.158	.170	.186	.148	-.076
55.00	-.012	.271	.251	.256	.270	.226	-.089
60.00	.160	.280	.310	.348	.318	.257	-.074
65.00	.359	.274	.314	.337	.320	.228	-.068
70.00	.587	.233	.334	.353	.329	.230	-.073
75.00	-1.159	.793	.385	.336	-.284	-.200	-.077
80.00	-.592	-.842	-.420	-.336	-.281	-.193	-.087
85.00	-.495	-.802	-.432	-.339	-.281	-.186	-.109
90.00	-.322	-.729	-.439	-.340	-.285	-.177	-.117
95.00	-.218	-.592	-.426	-.330	-.286	-.172	-.115
LOWER SURFACE							
1.25	.200	-.074	-.125	-.194	-.325	-.404	-.503
2.50	.137	-.056	-.100	-.168	-.243	-.301	-.387
5.00	.095	-.061	-.102	-.105	-.220	-.265	-.298
7.50	.039	-.074	-.120	-.137	-.228	-.268	-.323
10.00	.014	-.093	-.131	-.164	-.233	-.212	-.335
15.00	-.022	-.116	-.156	-.217	-.219	-.250	-.335
20.00	-.072	-.137	-.181	-.222	-.237	-.276	-.307
25.00	-.052	-.158	-.206	-.241	-.258	-.297	-.253
30.00	-.112	-.182	-.227	-.244	-.258	-.305	-.235
35.00	-.129	-.199	-.240	-.256	-.278	-.316	-.208
40.00	-.145	-.215	-.259	-.264	-.290	-.321	-.217
45.00	-.169	-.245	-.276	-.272	-.313	-.327	-.221
50.00	-.178	-.265	-.286	-.274	-.316	-.311	-.212
55.00	-.213	-.262	-.268	-.282	-.317	-.271	-.191
60.00	-.229	-.259	-.243	-.277	-.295	-.244	-.169
65.00	-.231	-.230	-.206	-.265	-.274	-.201	-.134
70.00	-.238						-.132
75.00	-.245	-.207	-.212	-.267	-.247	-.125	-.119
80.00	-.239	-.184	-.216	-.247	-.228	-.132	-.097
85.00	-.235	-.147	-.223	-.226	-.206	-.128	-.090
90.00	-.204	-.117	-.236	-.234	-.152	-.128	-.081
95.00	-.171	-.117	-.240	-.237	-.207	-.131	-.081

M = 0.90   α = 3.9°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.249	.175	.060	.309	-.067	-.063	-.064
1.25	.017	-.903	-1.039	-.981	-.998	-.940	-.899
2.50	-.087	-.794	-.926	-.860	-.896	-.882	-.805
5.00	-.160	-.390	-.509	-.458	-.415	-.344	-.371
7.50	-.188	-.355	-.419	-.346	-.352	-.308	-.353
10.00		-.339	-.368	-.323	-.327	-.292	-.321
15.00	-.214	-.323	-.283	-.283	-.256	-.240	-.191
20.00	-.225	-.307	-.217	-.226	-.207	-.184	-.142
25.00	-.241	-.298	-.177	-.185	-.161	-.138	-.102
30.00		-.264	-.147	-.146	-.116	-.100	-.082
35.00	-.247	-.183	-.106	-.100	-.066	-.054	-.067
40.00	-.246	-.091	-.060	-.045	-.016	-.001	-.052
45.00	-.237	-.015	-.002	.019	.042	.052	-.052
50.00	-.194	.127	.073	.081	.107	.102	-.052
55.00	-.064	.192	.128	.138	.148	.137	-.064
60.00	-.070	.167	.145	.191	.172	.150	-.060
65.00	-.268	.014	.144	.181	.177	.140	-.064
70.00	-.467	-.021	.163	.193		.134	-.064
75.00	-1.082	-.755	-.430	-.339	-.269	-.191	-.063
80.00	-.668	-.767	-.433	-.340	-.269	-.182	-.062
85.00	-.586	-.733	-.442	-.344	-.269	-.176	-.069
90.00	-.454	-.672	-.449	-.351	-.271	-.171	-.070
95.00	-.306	-.583	-.436	-.346	-.264	-.165	-.065
LOWER SURFACE							
1.25	.337	.341	.349	.328	.332	.338	.283
2.50	.314	.270	.267	.249	.254	.255	.200
5.00	.260	.200	.186	.197	.166	.150	.111
7.50	.224	.148	.138	.142	.109	.097	.031
10.00	.188	.121	.104	.098	.071	.097	-.027
15.00	.148	.073	.058	.037	.031	.011	-.119
20.00	.093	.036	.013	-.002	-.016	-.038	-.154
25.00	.089	.004	-.022	-.038	-.055	-.081	-.172
30.00	.035	-.024	-.051	-.059	-.079	-.113	-.180
35.00	.008	-.056	-.075	-.088	-.113	-.153	-.177
40.00	-.011	-.069	-.099	-.115	-.127	-.186	-.179
45.00	-.036	-.100	-.120	-.139	-.162	-.217	-.180
50.00	-.067	-.119	-.137	-.158	-.175	-.239	-.170
55.00	-.087	-.123	-.143	-.172	-.189	-.234	-.159
60.00	-.104	-.131	-.142	-.179	-.200	-.223	-.142
65.00	-.121	-.134	-.144	-.184	-.202	-.204	-.125
70.00	-.113						-.119
75.00	-.131	-.119	-.184	-.198	-.202	-.132	-.095
80.00	-.131	-.119	-.173	-.188	-.198	-.128	-.089
85.00	-.136	-.123	-.180	-.185	-.192	-.125	-.084
90.00	-.119	-.124	-.202	-.200	-.151	-.140	-.060
95.00	-.141	-.169	-.218	-.219	-.200	-.133	-.049

TABLE II — WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.90   α = 5.9°

Surface	Percent Chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.259	-.082	-.189	.165	-.440	-.404	-.345
	1.25	-.085	-1.067	-1.206	-1.086	-1.130	-.748	-.877
	2.50	-.200	-1.093	-1.127	-1.026	-1.022	-.622	-.861
	5.00	-.283	-.782	-.910	-.919	-.836	-.576	-.815
	7.50	-.310	-.636	-.776	-.788	-.712	-.560	-.788
	10.00	-.303	-.549	-.693	-.657	-.609	-.526	-.747
	15.00	-.315	-.462	-.560	-.496	-.507	-.466	-.603
	20.00	-.309	-.427	-.383	-.370	-.396	-.396	-.411
	25.00	-.329	-.411	-.266	-.297	-.281	-.324	-.211
	30.00	-.344	-.404	-.202	-.242	-.202	-.262	-.090
	35.00	-.333	-.363	-.158	-.189	-.147	-.207	-.056
	40.00	-.334	-.160	-.119	-.137	-.094	-.152	-.039
	45.00	-.342	-.031	-.072	-.075	-.053	-.098	-.040
	50.00	-.339	.072	-.017	-.014	-.014	-.046	-.044
	55.00	-.135	.146	.036	.047	.025	-.004	-.064
	60.00	.025	.134	.060	.121	.061	-.023	-.071
	65.00	.232	.021	.055	.113	.082	.008	-.088
	70.00	.434	-.000	.083	.134	-.617	.045	-.098
	75.00	-1.066	-.751	-.437	-.354	-.280	-.209	-.098
	80.00	-.679	-.768	-.444	-.356	-.287	-.207	-.096
	85.00	-.599	-.740	-.454	-.363	-.294	-.193	-.092
	90.00	-.470	-.677	-.459	-.363	-.290	-.172	-.086
	95.00	-.332	-.592	-.440	-.351	-.273	-.153	-.075
LOWER SURFACE	1.25	.394	.452	.439	.417	.430	.442	.388
	2.50	.396	.357	.362	.334	.362	.368	.307
	5.00	.364	.300	.278	.293	.271	.260	.213
	7.50	.323	.248	.224	.241	.214	.201	.131
	10.00	.285	.216	.187	.191	.171	.197	.064
	15.00	.242	.155	.137	.115	.123	.107	-.036
	20.00	.181	.115	.085	.076	.067	.048	-.100
	25.00	.173	.078	.047	.030	.027	.004	-.153
	30.00	.115	.048	.016	-.006	-.005	-.036	-.164
	35.00	.083	.016	-.011	-.027	-.038	-.079	-.166
	40.00	.062	-.007	-.039	-.059	-.064	-.117	-.162
	45.00	.031	-.037	-.062	-.086	-.100	-.155	-.161
	50.00	.001	-.058	-.084	-.111	-.117	-.182	-.156
	55.00	-.022	-.067	-.096	-.128	-.138	-.194	-.145
	60.00	-.042	-.074	-.101	-.140	-.147	-.191	-.130
	65.00	-.053	-.085	-.107	-.144	-.150	-.171	-.107
	70.00	-.055	-.078	-.143	-.171	-.162	-.116	-.102
	75.00	-.076	-.089	-.153	-.162	-.162	-.104	-.085
	80.00	-.073	-.102	-.165	-.163	-.161	-.107	-.077
	85.00	-.095	-.115	-.192	-.185	-.124	-.111	-.070
	90.00	-.091	-.171	-.211	-.205	-.178	-.105	-.055
	95.00	-.125						-.047

M = 0.90   α = 8.0°

Surface	Percent Chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.257	-.340	-.401	.031	-.689	-.765	-.685
	1.25	-.193	-1.165	-1.146	-1.172	-.904	-.837	-.774
	2.50	-.319	-1.176	-1.001	-1.111	-.868	-.771	-.764
	5.00	-.420	-1.109	-.909	-1.000	-.836	-.720	-.751
	7.50	-.452	-1.003	-.836	-.909	-.808	-.709	-.748
	10.00	-.441	-.926	-.793	-.845	-.780	-.692	-.738
	15.00	-.441	-.778	-.688	-.755	-.723	-.662	-.701
	20.00	-.416	-.637	-.592	-.682	-.602	-.628	-.643
	25.00	-.426	-.538	-.516	-.652	-.508	-.587	-.557
	30.00	-.423	-.494	-.431	-.600	-.445	-.558	-.453
	35.00	-.415	-.481	-.358	-.523	-.403	-.514	-.354
	40.00	-.420	-.335	-.294	-.418	-.361	-.445	-.283
	45.00	-.433	-.106	-.245	-.293	-.326	-.361	-.241
	50.00	-.462	.012	-.207	-.184	-.287	-.281	-.221
	55.00	-.265	.111	-.175	-.105	-.255	-.206	-.210
	60.00	-.065	.114	-.171	-.026	-.221	-.152	-.201
	65.00	.152	.039	-.181	-.063	-.177	-.152	-.193
	70.00	.370	.006	-.118	-.004	-.356	-.061	-.190
	75.00	-1.061	-.774	-.471	-.362	-.340	-.248	-.185
	80.00	-.686	-.776	-.508	-.374	-.341	-.233	-.172
	85.00	-.609	-.753	-.482	-.363	-.310	-.201	-.158
	90.00	-.000	-.688	-.448	-.333	-.278	-.171	-.148
	95.00	-.421	-.602	-.409	-.302	-.244	-.146	-.135
LOWER SURFACE	1.25	.422	.521	.490	.476	.470	.468	.433
	2.50	.455	.459	.428	.400	.418	.420	.371
	5.00	.438	.385	.351	.360	.337	.323	.287
	7.50	.415	.329	.298	.306	.279	.265	.204
	10.00	.371	.297	.260	.257	.236	.259	.143
	15.00	.326	.229	.203	.185	.183	.170	.046
	20.00	.258	.184	.150	.139	.127	.108	-.017
	25.00	.242	.143	.109	.095	.085	.059	-.091
	30.00	.180	.110	.076	.065	.052	.022	-.123
	35.00	.142	.077	.045	.030	.017	.024	-.137
	40.00	.119	.050	.016	.000	-.013	-.063	-.154
	45.00	.089	.020	-.011	-.032	-.047	-.098	-.143
	50.00	.053	-.007	-.036	-.061	-.067	-.131	-.133
	55.00	.025	-.019	-.051	-.078	-.089	-.150	-.128
	60.00	.008	-.033	-.062	-.089	-.100	-.154	-.107
	65.00	-.009	-.043	-.074	-.101	-.105	-.150	-.092
	70.00	-.013	-.045	-.135	-.123	-.118	-.106	-.089
	75.00	-.036	-.068	-.126	-.119	-.122	-.102	-.067
	80.00	-.036	-.088	-.137	-.120	-.122	-.099	-.067
	85.00	-.060	-.112	-.159	-.137	-.087	-.101	-.065
	90.00	-.065	-.175	-.173	-.159	-.140	-.099	-.057
	95.00	-.113						-.065

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.90, α = 11.3°

Surface	Percent chord	P at 0.135b/2	P at 0.25b/2	P at 0.40b/2	P at 0.55b/2	P at 0.70b/2	P at 0.85b/2	P at 0.95b/2
Upper	.00	-.214	-.694	-.777	-.352	-.917	-.548	-.462
	1.25	-.344	-1.328	-1.252	-1.209	-.840	-.504	-.380
	2.50	-.497	-1.311	-1.113	-1.193	-.834	-.505	-.377
	5.00	-.619	-1.346	-1.085	-1.168	-.825	-.491	-.374
	7.50	-.659	-1.325	-1.039	-1.189	-.820	-.494	-.372
	10.00	-.648	-1.275	-1.010	-1.205	-.818	-.487	-.371
	15.00	-.640	-1.180	-.942	-1.149	-.812	-.477	-.370
	20.00	-.601	-1.122	-.850	-1.105	-.804	-.470	-.368
	25.00	-.578	-1.041	-.775	-1.079	-.794	-.452	-.365
	30.00	-.568	-.895	-.709	-1.039	-.786	-.449	-.364
	35.00	-.546	-.651	-.654	-1.000	-.777	-.438	-.361
	40.00	-.543	-.513	-.647	-.957	-.759	-.430	-.356
	45.00	-.549	-.317	-.667	-.877	-.739	-.415	-.350
	50.00	-.575	-.064	-.674	-.732	-.706	-.402	-.343
	55.00	-.443	-.022	-.649	-.561	-.662	-.394	-.329
	60.00	-.289	-.026	-.618	-.395	-.615	-.383	-.309
	65.00	-.114	-.030	-.595	-.373	-.588	-.376	-.299
	70.00	-.201	-.124	-.502	-.315	-.540	-.363	-.022
	75.00	-1.015	-.797	-.564	-.367	-.498	-.364	-.273
	80.00	-.810	-.794	-.510	-.379	-.519	-.362	-.265
	85.00	-.654	-.766	-.450	-.356	-.487	-.356	-.259
	90.00	-.559	-.710	-.404	-.321	-.445	-.340	-.256
	95.00	-.485	-.617	-.365	-.297	-.410	-.325	-.244
Lower	1.25	.419	.588	.530	.545	.490	.490	.450
	2.50	.512	.560	.511	.484	.477	.481	.414
	5.00	.590	.499	.452	.453	.419	.408	.346
	7.50	.567	.448	.407	.400	.368	.352	.276
	10.00	.519	.413	.370	.353	.325	.338	.211
	15.00	.473	.341	.314	.290	.273	.254	.119
	20.00	.391	.297	.259	.241	.219	.196	.012
	25.00	.361	.249	.216	.195	.175	.143	-.028
	30.00	.309	.210	.178	.163	.138	.098	-.083
	35.00	.254	.177	.144	.127	.100	.051	-.122
	40.00	.231	.146	.111	.090	.065	.009	-.145
	45.00	.194	.112	.083	.059	.032	-.036	-.167
	50.00	.140	.082	.051	.028	.003	-.079	-.179
	55.00	.135	.063	.026	-.002	-.023	-.110	-.182
	60.00	.097	.045	.010	-.018	-.044	-.134	-.181
	65.00	.083	.027	-.014	-.035	-.053	-.157	-.176
	70.00	.064						-.173
	75.00	.013	-.013	-.084	-.081	-.087	-.124	-.164
	80.00	.023	-.015	-.073	-.070	-.103	-.150	-.170
	85.00	.022	-.050	-.087	-.081	-.117	-.186	-.168
	90.00	-.002	-.090	-.109	-.107	-.102	-.220	-.169
	95.00	-.014	-.167	-.126	-.134	-.183	-.235	-.183

M = 0.90, α = 15.5°

Surface	Percent chord	P at 0.135b/2	P at 0.25b/2	P at 0.40b/2	P at 0.55b/2	P at 0.70b/2	P at 0.85b/2	P at 0.95b/2
Upper	.00	-.119	-1.063	-1.117	-.812	-.545	-.510	-.510
	1.25	-.494	-1.475	-1.061	-.776	-.545	-.502	-.467
	2.50	-.702	-1.447	-1.017	-.777	-.551	-.511	-.465
	5.00	-.880	-1.468	-1.043	-.770	-.556	-.498	-.467
	7.50	-.914	-1.477	-1.026	-.768	-.558	-.509	-.470
	10.00	-.891	-1.456	-1.011	-.761	-.565	-.511	-.462
	15.00	-.876	-1.391	-.993	-.744	-.570	-.511	-.454
	20.00	-.817	-1.381	-.970	-.725	-.570	-.498	-.453
	25.00	-.763	-1.340	-.950	-.715	-.565	-.509	-.448
	30.00	-.725	-1.279	-.942	-.700	-.562	-.504	-.458
	35.00	-.689	-1.189	-.930	-.678	-.560	-.500	-.457
	40.00	-.672	-1.002	-.918	-.657	-.558	-.495	-.454
	45.00	-.664	-.700	-.899	-.636	-.550	-.491	-.454
	50.00	-.631	-.551	-.874	-.622	-.537	-.503	-.448
	55.00	-.478	-.415	-.838	-.614	-.532	-.528	-.439
	60.00	-.354	-.399	-.801	-.546	-.534	-.511	-.428
	65.00	-.223	-.598	-.811	-.603	-.501	-.437	-.433
	70.00	-.027	-.434	-.760	-.564	-.499	-.453	-.015
	75.00	-1.127	-.885	-.745	-.573	-.500	-.449	-.399
	80.00	-.811	-.872	-.713	-.578	-.498	-.441	-.387
	85.00	-.689	-.759	-.694	-.582	-.496	-.421	-.375
	90.00	-.663	-.590	-.673	-.573	-.496	-.441	-.361
	95.00	-.532	-.453	-.656	-.568	-.490	-.421	-.336
Lower	1.25	.356	.617	.530	.573	.484	.456	.428
	2.50	.519	.642	.574	.543	.514	.496	.433
	5.00	.650	.611	.548	.491	.445	.448	.389
	7.50	.718	.571	.515	.451	.405	.402	.328
	10.00	.669	.538	.485	.398	.356	.391	.272
	15.00	.617	.472	.432	.346	.300	.310	.176
	20.00	.534	.425	.377	.299	.253	.251	.081
	25.00	.495	.379	.333	.260	.209	.200	.010
	30.00	.444	.339	.290	.218	.168	.147	-.055
	35.00	.383	.299	.257	.181	.128	.097	-.113
	40.00	.354	.267	.230	.139	.083	.045	-.149
	45.00	.318	.230	.188	.101	.046	.008	-.176
	50.00	.258	.194	.150	.069	.007	-.061	-.205
	55.00	.251	.170	.125	.040	-.025	-.107	-.224
	60.00	.212	.146	.099	.005	-.051	-.145	-.231
	65.00	.191	.123	.069			-.183	-.259
	70.00	.165			-.078	-.114	-.153	-.254
	75.00	.101	.097	-.008	-.082	-.148	-.202	-.252
	80.00	.108	.061	-.014	-.119	-.182	-.265	-.279
	85.00	.107	.023	-.048	-.170	-.188	-.324	-.276
	90.00	.049	-.014	-.106	-.240	-.290	-.338	-.270
	95.00	.026	-.077	-.173				-.278

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.94 α = 0.0°							
UPPER SURFACE							
.00	.291	.536	.489	.779	.479	.471	.378
1.25	.241	-.060	-.068	-.014	-.116	-.180	-.145
2.50	.170	-.047	-.049	-.019	-.026	-.050	-.100
5.00	.096	-.051	-.048	-.018	-.018	-.072	-.042
7.50	.053	-.064	-.047	-.005	-.009	-.037	-.023
10.00	.036	-.076	-.052	-.010	-.026	-.025	-.041
15.00	-.007	-.086	-.045	-.036	-.023	-.009	-.100
20.00	-.037	-.095	-.029	-.029	-.020	-.000	-.146
25.00	-.060	-.101	-.015	-.023	-.008	-.007	-.107
30.00	-.079	-.086	-.002	-.009	-.011	-.009	-.083
35.00	-.080	-.048	.019	.013	.028	.020	-.053
40.00	-.089	.016	.046	.040	.067	.037	-.056
45.00	-.083	.098	.088	.087	.112	.074	-.078
50.00	-.066	.196	.156	.152	.177	.135	-.106
55.00	-.025	.295	.248	.242	.262	.211	-.127
60.00	.187	.295	.302	.337	.308	.241	-.103
65.00	.375	.297	.302	.330	.311	.216	-.088
70.00	.604	.248	.323	.346	.323	.216	-.093
75.00	-1.192	-.852	-.424	-.368	-.309	-.225	-.096
80.00	-.648	-.895	-.462	-.369	-.305	-.221	-.109
85.00	-.519	-.849	-.465	-.367	-.306	-.214	-.131
90.00	-.397	-.781	-.468	-.367	-.310	-.205	-.136
95.00	-.318	-.650	-.456	-.360	-.317	-.198	-.135
LOWER SURFACE							
1.25	.218	-.054	-.100	-.171	-.320	-.412	-.535
2.50	.161	-.034	-.079	-.153	-.240	-.319	-.409
5.00	.110	-.038	-.084	-.096	-.231	-.289	-.315
7.50	.059	-.059	-.105	-.134	-.247	-.291	-.342
10.00	.035	-.072	-.118	-.160	-.261	-.240	-.354
15.00	-.000	-.104	-.147	-.214	-.253	-.297	-.355
20.00	-.052	-.125	-.172	-.237	-.277	-.325	-.374
25.00	-.035	-.144	-.197	-.262	-.309	-.350	-.381
30.00	-.095	-.166	-.224	-.269	-.322	-.362	-.349
35.00	-.108	-.184	-.247	-.295	-.343	-.378	-.295
40.00	-.126	-.200	-.271	-.320	-.365	-.384	-.293
45.00	-.151	-.231	-.297	-.352	-.399	-.382	-.282
50.00	-.170	-.258	-.319	-.373	-.409	-.396	-.253
55.00	-.202	-.267	-.329	-.383	-.389	-.431	-.206
60.00	-.220	-.269	-.329	-.370	-.342	-.392	-.162
65.00	-.229	-.264	-.314	-.324	-.309	-.286	-.129
70.00	-.237						-.127
75.00	-.253	-.276	-.262	-.308	-.300	-.127	-.121
80.00	-.260	-.279	-.251	-.292	-.281	-.117	-.107
85.00	-.275	-.252	-.254	-.270	-.278	-.119	-.103
90.00	-.275	-.197	-.278	-.262	-.239	-.135	-.091
95.00	-.269	-.162	-.290	-.268	-.276	-.148	-.095
M = 0.94 α = 3.9°							
UPPER SURFACE							
.00	.277	.235	.115	.352	-.011	-.028	.078
1.25	.054	-.850	-.973	-.847	-.915	-.907	-.970
2.50	-.043	-.793	-.893	-.705	-.854	-.882	-.889
5.00	-.125	-.352	-.544	-.497	-.503	-.560	-.543
7.50	-.160	-.334	-.430	-.393	-.383	-.367	-.434
10.00	-.161	-.325	-.413	-.339	-.354	-.329	-.339
15.00	-.188	-.305	-.391	-.282	-.276	-.277	-.296
20.00	-.200	-.302	-.201	-.235	-.234	-.216	-.174
25.00	-.230	-.306	-.115	-.201	-.202	-.174	-.109
30.00	-.239	-.308	-.103	-.158	-.147	-.130	-.092
35.00	-.234	-.304	-.081	-.119	-.098	-.077	-.080
40.00	-.253	-.069	-.044	-.072	-.041	-.025	-.073
45.00	-.268	-.060	.010	-.013	-.031	-.040	-.075
50.00	-.273	.167	.081	.055	.092	.095	-.087
55.00	-.080	.212	.127	.117	.132	.127	-.102
60.00	.086	.168	.142	.177	.156	.139	-.092
65.00	.266	.135	.136	.163	.160	.129	-.094
70.00	.473	.024	.154	.173	.175	.119	-.090
75.00	-1.218	-.863	-.497	-.386	-.283	-.210	-.087
80.00	-.717	-.908	-.495	-.382	-.283	-.206	-.085
85.00	-.688	-.854	-.486	-.383	-.285	-.203	-.085
90.00	-.527	-.768	-.481	-.383	-.289	-.197	-.087
95.00	-.395	-.660	-.469	-.376	-.286	-.191	-.076
LOWER SURFACE							
1.25	.347	.342	.338	.323	.323	.331	.280
2.50	.326	.273	.258	.246	.248	.251	.199
5.00	.279	.204	.179	.188	.160	.140	.112
7.50	.235	.156	.130	.135	.104	.089	.036
10.00	.200	.128	.098	.090	.066	.090	.020
15.00	.153	.080	.052	.028	.030	.004	-.124
20.00	.102	.043	.007	.011	.025	-.050	-.209
25.00	.100	.007	-.032	-.048	-.059	-.095	-.285
30.00	.042	.022	-.060	-.070	-.091	-.127	-.302
35.00	.016	-.050	-.085	-.100	-.118	-.166	-.273
40.00	-.002	-.072	-.113	-.124	-.151	-.204	-.262
45.00	-.034	-.104	-.134	-.147	-.189	-.253	-.245
50.00	-.063	-.128	-.154	-.170	-.210	-.299	-.225
55.00	-.086	-.135	-.161	-.187	-.235	-.330	-.189
60.00	-.107	-.144	-.155	-.199	-.247	-.347	-.156
65.00	-.127	-.147	-.148	-.216	-.247	-.321	-.130
70.00	-.119						-.122
75.00	-.144	-.136	-.155	-.253	-.239	-.145	-.107
80.00	-.142	-.137	-.179	-.251	-.229	-.130	-.099
85.00	-.161	-.125	-.202	-.253	-.238	-.133	-.090
90.00	-.141	-.100	-.243	-.256	-.204	-.143	-.066
95.00	-.174	-.122	-.282	-.258	-.265	-.142	-.053

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.94   α = 5.9° — UPPER SURFACE

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	−.289	−.014	−.096	−.253	−.361	−.381	−.313
1.25	−.028	−.997	−1.180	−1.155	−1.176	−1.013	−.967
2.50	−.139	−1.013	−1.137	−1.183	−1.176	−.947	−.954
5.00	−.229	−.697	−1.091	−1.117	−1.103	−.834	−.872
7.50	−.263	−.542	−1.002	−1.065	−1.031	−.759	−.817
10.00	−.260	−.476	−.864	−1.013	−.906	−.665	−.758
15.00	−.276	−.417	−.484	−.668	−.468	−.496	−.625
20.00	−.273	−.398	−.441	−.266	−.317	−.402	−.505
25.00	−.291	−.391	−.366	−.197	−.257	−.318	−.371
30.00	−.300	−.388	−.179	−.148	−.203	−.257	−.238
35.00	−.305	−.392	−.111	−.118	−.155	−.197	−.137
40.00	−.313	−.327	−.062	−.081	−.093	−.137	−.084
45.00	−.326	−.054	−.011	−.027	−.041	−.080	−.072
50.00	−.361	−.083	.043	.037	−.017	−.023	−.076
55.00	−.211	−.144	.086	.107	−.071	−.055	−.091
60.00	−.036	−.117	.106	.183	−.116	−.054	−.096
65.00	−.187	−.079	.106	.178	−.142	−.068	−.112
70.00	−.410	−.004	−.129	−.188	−.152	−.218	−.115
75.00	−1.185	−.839	−.510	−.395	−.283	−.221	−.115
80.00	−.689	−.876	−.510	−.393	−.284	−.218	−.109
85.00	−.641	−.837	−.503	−.390	−.286	−.206	−.104
90.00	−.529	−.758	−.498	−.387	−.289	−.189	−.096
95.00	−.397	−.653	−.488	−.378	−.286		−.076

M = 0.94   α = 5.9° — LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.406	.458	.437	.412	.426	.431	.385
2.50	.409	.384	.359	.316	.356	.358	.306
5.00	.371	.311	.279	.284	.265	.249	.217
7.50	.337	.259	.224	.236	.210	.194	.133
10.00	.300	.227	.188	.185	.168	.186	.075
15.00	.257	.166	.134	.114	.122	.096	−.034
20.00	.193	.125	.086	.073	.066	.038	−.126
25.00	.182	.086	.049	.031	.025	−.009	−.215
30.00	.125	.053	.015	.010	−.012	−.050	−.266
35.00	.091	.024	−.013	−.024	−.046	−.093	−.284
40.00	.068	.000	−.038	−.053	−.083	−.135	−.295
45.00	.036	−.030	−.064	−.081	−.115	−.181	−.278
50.00	.006	−.057	−.086	−.108	−.146	−.227	−.251
55.00	−.014	−.070	−.096	−.128	−.172	−.267	−.204
60.00	−.037	−.079	−.098	−.145	−.184	−.295	−.150
65.00	−.059	−.086	−.100	−.164	−.189	−.311	−.114
70.00	−.054				−.199	−.173	−.108
75.00	−.078	−.078	−.130	−.203	−.199	−.171	−.094
80.00	−.077	−.085	−.149	−.205	−.208	−.148	−.090
85.00	−.098	−.082	−.171	−.214	−.218	−.115	−.081
90.00	−.091	−.085	−.219	−.224	−.192		−.061
95.00	−.129	−.119	−.257	−.241	−.253	−.125	−.048

M = 0.94   α = 7.9° — UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	−.286	−.211	−.280	−.121	−.585	−.612	−.599
1.25	−.120	−1.096	−1.244	−1.288	−1.297	−.725	−.843
2.50	−.242	−1.101	−1.191	−1.316	−1.290	−.690	−.835
5.00	−.346	−1.032	−1.157	−1.261	−1.246	−.657	−.824
7.50	−.382	−.887	−1.031	−1.215	−1.181	−.640	−.819
10.00	−.377	−.802	−.934	−1.178	−1.077	−.609	−.811
15.00	−.385	−.665	−.773	−1.064	−.838	−.572	−.779
20.00	−.367	−.558	−.614	−.720	−.720	−.538	−.729
25.00	−.379	−.494	−.492	−.552	−.628	−.506	−.645
30.00	−.379	−.464	−.382	−.464	−.561	−.497	−.548
35.00	−.375	−.463	−.300	−.349	−.489	−.479	−.426
40.00	−.381	−.467	−.243	−.233	−.414	−.459	−.322
45.00	−.389	−.179	−.200	−.148	−.345	−.439	−.261
50.00	−.432	−.013	−.158	−.079	−.285	−.418	−.232
55.00	−.310	−.105	−.133	−.022	−.232	−.397	−.220
60.00	−.130	−.102	−.133	−.059	−.194	−.367	−.205
65.00	−.111	−.105	−.146	−.065	−.178	−.328	−.202
70.00	−.355	−.007	−.098	−.104	−.132	−.267	−.199
75.00	−1.166	−.853	−.535	−.430	−.332	−.311	−.186
80.00	−.714	−.880	−.548	−.427	−.346	−.301	−.174
85.00	−.567	−.864	−.534	−.427	−.334	−.261	−.162
90.00	−.456	−.788	−.511	−.415	−.312	−.236	−.149
95.00	−.431	−.677	−.487	−.397	−.281	−.194	−.137

M = 0.94   α = 7.9° — LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.436	.528	.488	.451	.454	.455	.419
2.50	.472	.463	.425	.376	.398	.400	.350
5.00	.449	.389	.345	.345	.316	.303	.267
7.50	.424	.335	.289	.289	.257	.242	.193
10.00	.383	.299	.256	.244	.216	.242	.127
15.00	.338	.237	.202	.171	.162	.148	.021
20.00	.270	.191	.146	.127	.109	.090	−.051
25.00	.254	.150	.106	.085	.064	.038	−.159
30.00	.193	.115	.070	.056	.027	.003	−.211
35.00	.153	.082	.040	.020	.006	−.050	−.255
40.00	.129	.054	.010	.014	−.043	−.088	−.278
45.00	.095	.020	−.017	−.045	−.082	−.136	−.288
50.00	.061	−.007	−.041	−.079	−.106	−.186	−.280
55.00	.037	−.021	−.056	−.098	−.140	−.224	−.238
60.00	.010	−.034	−.064	−.120	−.148	−.255	−.152
65.00	−.006	−.042	−.074	−.135	−.150	−.275	−.105
70.00	−.006						−.097
75.00	−.037	−.043	−.130	−.179	−.174	−.144	−.081
80.00	−.034	−.059	−.145	−.182	−.193	−.154	−.081
85.00	−.058	−.074	−.167	−.186	−.203	−.133	−.083
90.00	−.060	−.090	−.208	−.194	−.172	−.095	−.070
95.00	−.103	−.145	−.242	−.218	−.225	−.099	−.072

TABLE II — WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.94   α = 11.3°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.243	-.563	-.625	-181	-.878	-.738	-.521
1.25	-.258	-1.216	-1.229	-1.350	-1.094	-.672	-.444
2.50	-.406	-1.197	-1.101	-1.357	-1.094	-.675	-.437
5.00	-.528	-1.228	-1.048	-1.319	-1.075	-.653	-.445
7.50	-.571	-1.201	-.986	-1.279	-1.060	-.656	-.438
10.00	-.562	-1.146	-.951	-1.229	-1.046	-.643	-.426
15.00	-.569	-1.049	-.893	-1.069	-1.021	-.622	-.418
20.00	-.530	-.996	-.814	-.944	-.992	-.593	-.410
25.00	-.513	-.918	-.719	-.912	-.967	-.563	-.401
30.00	-.503	-.798	-.632	-.873	-.937	-.558	-.400
35.00	-.491	-.624	-.561	-.840	-.908	-.544	-.397
40.00	-.482	-.504	-.505	-.806	-.875	-.525	-.391
45.00	-.490	-.432	-.529	-.757	-.844	-.504	-.387
50.00	-.522	-.057	-.597	-.685	-.808	-.487	-.380
55.00	-.421	-.033	-.628	-.575	-.766	-.465	-.374
60.00	-.271	-.055	-.635	-.407	-.706	-.451	-.363
65.00	-.113	-.025	-.669	-.403	-.656	-.449	-.367
70.00	-.208	-.081	-.579	-.351	-.361	-.421	-.337
75.00	-1.121	-.922	-.733	-.462	-.547	-.413	-.335
80.00	-.634	-.953	-.633	-.469	-.569	-.416	-.324
85.00	-.537	-.910	-.559	-.435	-.530	-.411	-.323
90.00	-.510	-.836	-.518	-.397	-.475	-.398	-.317
95.00	-.472	-.731	-.477	-.361	-.428	-.382	-.308

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.426	.607	.546	.552	.488	.478	.456
2.50	.537	.573	.518	.483	.470	.465	.415
5.00	.646	.509	.459	.451	.408	.391	.343
7.50	.579	.457	.411	.395	.356	.330	.276
10.00	.537	.422	.375	.344	.310	.322	.211
15.00	.484	.351	.318	.283	.259	.238	.114
20.00	.408	.308	.264	.238	.203	.177	.021
25.00	.381	.263	.222	.192	.157	.125	-.050
30.00	.324	.225	.184	.155	.119	.079	-.117
35.00	.268	.185	.153	.117	.078	.030	-.162
40.00	.249	.159	.115	.077	.044	.012	-.191
45.00	.209	.121	.087	.043	.004	.062	-.212
50.00	.154	.090	.056	.011	-.024	-.108	-.238
55.00	.147	.071	.037	-.020	-.053	-.147	-.242
60.00	.110	.052	.017	-.046	-.073	-.180	-.238
65.00	.096	.036	-.009	-.072	-.092	-.207	-.252
70.00	.075						-.249
75.00	.024	-.026	-.093	-.131	-.126	-.137	-.237
80.00	.035	-.001	-.082	-.115	-.146	-.180	-.264
85.00	.032	-.024	-.113	-.125	-.157	-.226	-.257
90.00	.008	-.057	-.160	-.157	-.135	-.287	-.249
95.00	-.000	-.130	-.202	-.198	-.203	-.299	-.249

M = 0.94   α = 15.6°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.160	-.925	-1.042	-.741	-.615	-.546	-.556
1.25	-.406	-1.349	-1.231	-.741	-.596	-.540	-.527
2.50	-.608	-1.322	-1.152	-.737	-.604	-.547	-.519
5.00	-.777	-1.344	-1.186	-.725	-.605	-.539	-.514
7.50	-.818	-1.351	-1.162	-.717	-.609	-.553	-.516
10.00	-.800	-1.329	-1.154	-.712	-.614	-.553	-.516
15.00	-.788	-1.265	-1.131	-.712	-.618	-.561	-.516
20.00	-.735	-1.258	-1.101	-.727	-.617	-.561	-.516
25.00	-.689	-1.237	-1.101	-.740	-.617	-.551	-.517
30.00	-.653	-1.213	-1.112	-.740	-.617	-.563	-.520
35.00	-.624	-1.202	-1.071	-.738	-.617	-.564	-.526
40.00	-.608	-1.102	-1.014	-.727	-.614	-.561	-.525
45.00	-.608	-.729	-.960	-.713	-.610	-.561	-.520
50.00	-.636	-.243	-.923	-.700	-.604	-.556	-.516
55.00	-.546	-.094	-.895	-.683	-.592	-.557	-.505
60.00	-.431	-.085	-.848	-.604	-.584	-.570	-.497
65.00	-.307	-.327	-.838	-.668	-.584	-.583	-.496
70.00	-.097	-.102	-.780	-.626	-.561	-.573	-.004
75.00	-1.102	-.922	-.791	-.637	-.561	-.507	-.479
80.00	-.859	-.950	-.748	-.642	-.564	-.522	-.462
85.00	-.637	-.898	-.723	-.643	-.556	-.522	-.447
90.00	-.568	-.788	-.704	-.635	-.553	-.514	-.434
95.00	-.465	-.617	-.684	-.626	-.550	-.495	-.413

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.372	.645	.550	.587	.493	.464	.435
2.50	.546	.667	.587	.558	.522	.501	.441
5.00	.688	.635	.558	.545	.490	.456	.402
7.50	.743	.592	.524	.501	.450	.411	.342
10.00	.690	.559	.495	.461	.412	.402	.286
15.00	.638	.494	.442	.403	.365	.324	.190
20.00	.555	.446	.385	.351	.314	.266	.091
25.00	.517	.399	.343	.309	.264	.212	.015
30.00	.463	.359	.305	.271	.223	.164	-.053
35.00	.402	.322	.269	.233	.184	.113	-.115
40.00	.377	.288	.233	.193	.144	.066	-.159
45.00	.337	.249	.199	.153	.101	.014	-.192
50.00	.278	.219	.167	.118	.067	-.043	-.228
55.00	.271	.195	.141	.084	.023	-.090	-.254
60.00	.234	.171	.114	.056	-.001	-.131	-.265
65.00	.216	.152	.085	.028	-.027	-.171	-.287
70.00	.184						-.301
75.00	.122	.127	.011	-.053	-.093	-.166	-.316
80.00	.128	.087	.005	-.057	-.126	-.210	-.340
85.00	.126	.050	-.023	-.090	-.163	-.265	-.360
90.00	.068	.014	-.071	-.139	-.167	-.338	-.377
95.00	.044	-.051	-.129	-.211	-.276	-.379	-.373

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.98, α = -0.1° — UPPER SURFACE							
.00	.344	.561	.507	.803	.494	.486	.430
1.25	.270	-.034	-.064	.010	.121	.145	-.108
2.50	.201	-.018	-.039	.005	.034	.022	-.072
5.00	.128	-.019	-.033	.010	.028	.053	-.028
7.50	.084	-.035	-.029	.032	.000	.018	-.008
10.00	.072	-.054	-.031	.016	-.020	.006	-.037
15.00	.024	-.066	-.018	.012	-.020	.032	-.091
20.00	-.006	-.081	-.003	.007	-.020	.021	-.173
25.00	-.037	-.097	.021	.004	-.011	.013	-.164
30.00	-.058	-.079	.034	.005	-.002	.007	-.123
35.00	-.058	-.026	.053	.025	.025	.006	-.085
40.00	-.076	.052	.078	.048	.051	.019	-.075
45.00	-.083	.138	.115	.090	.097	.046	-.093
50.00	-.051	.236	.182	.152	.159	.101	-.139
55.00	-.054	.329	.264	.240	.249	.185	-.207
60.00	-.225	.325	.311	.339	.303	.228	-.215
65.00	-.398	.327	.310	.332	.308	.213	-.193
70.00	-.616	.277	.328	.345	.323	.210	-.188
75.00	-1.187	-.943	-.503	-.459	-.407	-.327	-.173
80.00	-.695	-1.013	-.585	-.462	-.406	-.319	-.187
85.00	-.626	-.941	-.604	-.469	-.401	-.306	-.209
90.00	-.457	-.885	-.613	-.469	-.401	-.294	-.219
95.00	-.343	-.644	-.592	-.456	-.403	-.278	-.219
M = 0.98, α = -0.1° — LOWER SURFACE							
1.25	-.246	-.022	-.057	-.122	-.257	-.321	-.410
2.50	-.192	-.006	-.040	-.110	-.186	-.246	-.307
5.00	-.143	-.010	-.050	-.057	-.188	-.243	-.251
7.50	-.090	-.029	-.072	-.095	-.205	-.249	-.277
10.00	-.064	-.043	-.082	-.120	-.217	-.196	-.292
15.00	-.027	-.071	-.108	-.171	-.228	-.257	-.294
20.00	-.029	-.094	-.136	-.197	-.245	-.287	-.332
25.00	-.006	-.108	-.161	-.226	-.276	-.313	-.369
30.00	-.070	-.134	-.183	-.235	-.287	-.330	-.363
35.00	-.082	-.156	-.206	-.264	-.309	-.351	-.339
40.00	-.091	-.168	-.233	-.288	-.335	-.375	-.361
45.00	-.125	-.199	-.259	-.314	-.371	-.406	-.389
50.00	-.144	-.227	-.282	-.345	-.382	-.435	-.401
55.00	-.174	-.235	-.290	-.354	-.405	-.487	-.426
60.00	-.193	-.246	-.296	-.354	-.411	-.493	-.414
65.00	-.201	-.234	-.285	-.336	-.366	-.413	-.313
70.00	-.208						-.316
75.00	-.227	-.247	-.295	-.311	-.344	-.337	-.308
80.00	-.230	-.258	-.259	-.286	-.333	-.324	-.275
85.00	-.249	-.246	-.227	-.285	-.338	-.320	-.254
90.00	-.255	-.208	-.249	-.307	-.288	-.314	-.228
95.00	-.258	-.147	-.275	-.329	-.360	-.323	-.186
M = 0.98, α = 3.9° — UPPER SURFACE							
.00	.324	.297	.179	.417	.058	.042	.127
1.25	.104	-.776	-.905	-.884	-.793	-.833	-.905
2.50	-.009	-.718	-.831	-.938	-.737	-.852	-.849
5.00	-.070	-.294	-.598	-.846	-.507	-.665	-.679
7.50	-.109	-.286	-.346	-.628	-.352	-.352	-.491
10.00	-.110	-.274	-.346	-.300	-.326	-.282	-.315
15.00	-.143	-.265	-.340	-.135	-.265	-.259	-.272
20.00	-.151	-.264	-.334	-.115	-.220	-.212	-.261
25.00	-.182	-.264	-.200	-.115	-.181	-.165	-.172
30.00	-.199	-.266	-.064	-.110	-.136	-.135	-.126
35.00	-.196	-.284	-.023	-.084	-.086	-.094	-.111
40.00	-.209	-.199	-.011	-.041	-.036	-.053	-.100
45.00	-.228	.071	.059	.019	-.025	.000	-.112
50.00	-.268	.190	.116	.088	-.086	-.065	-.143
55.00	-.122	.220	.152	.147	-.136	-.105	-.189
60.00	-.058	.149	.160	.200	-.166	-.117	-.209
65.00	-.250	.140	.155	.180	-.173	-.108	-.226
70.00	-.463	.056	.174	.191	-.186	-.097	-.218
75.00	-1.249	-1.002	-.596	-.472	-.409	-.313	-.207
80.00	-.700	-1.041	-.609	-.473	-.405	-.307	-.201
85.00	-.549	-.938	-.616	-.482	-.403	-.301	-.209
90.00	-.466	-.838	-.615	-.482	-.399	-.295	-.213
95.00	-.384	-.633	-.603	-.477	-.391	-.288	-.213
M = 0.98, α = 3.9° — LOWER SURFACE							
1.25	.370	.362	.347	.321	.333	.337	.299
2.50	.357	.295	.273	.244	.261	.262	.224
5.00	.323	.228	.196	.196	.168	.155	.144
7.50	.267	.180	.147	.142	.112	.107	.074
10.00	.235	.152	.113	.100	.071	.113	.019
15.00	.193	.107	.071	.036	.041	.027	-.077
20.00	.134	.069	.021	.000	-.016	-.024	-.160
25.00	.134	.036	-.018	-.036	-.052	-.070	-.258
30.00	.076	.004	-.047	-.061	-.072	-.098	-.297
35.00	.046	-.025	-.074	-.096	-.086	-.136	-.315
40.00	.027	-.048	-.100	-.122	-.108	-.171	-.319
45.00	-.004	-.082	-.130	-.149	-.149	-.215	-.323
50.00	-.035	-.110	-.153	-.163	-.178	-.267	-.330
55.00	-.056	-.119	-.160	-.164	-.202	-.312	-.347
60.00	-.077	-.129	-.162	-.143	-.220	-.352	-.331
65.00	-.107	-.138	-.159	-.154	-.239	-.372	-.327
70.00	-.101						-.323
75.00	-.121	-.138	-.122	-.200	-.250	-.295	-.316
80.00	-.128	-.145	-.127	-.206	-.256	-.311	-.313
85.00	-.156	-.126	-.140	-.223	-.268	-.335	-.297
90.00	-.138	-.090	-.179	-.252	-.243	-.364	-.262
95.00	-.173	-.052	-.222	-.292	-.328	-.343	-.197

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.98   α = 5.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.319	.094	-.010	.326	-.251	-.301	-.217
1.25	.023	-.960	-1.071	-1.050	-1.070	-1.042	-1.112
2.50	-.062	-.945	-1.041	-1.102	-1.100	-1.127	-1.106
5.00	-.174	-.655	-1.004	-1.037	-1.038	-1.033	-1.000
7.50	-.210	-.455	-.923	-.985	-.994	-.996	-.974
10.00	-.210	-.409	-.854	-.943	-.960	-.952	-.946
15.00	-.234	-.367	-.439	-.867	-.795	-.582	-.496
20.00	-.229	-.355	-.391	-.341	-.167	-.288	-.267
25.00	-.250	-.353	-.404	-.180	-.139	-.235	-.186
30.00	-.258	-.351	-.202	-.139	-.100	-.203	-.163
35.00	-.265	-.359	-.095	-.104	-.100	-.158	-.150
40.00	-.270	-.354	-.044	-.062	-.062	-.111	-.138
45.00	-.285	-.062	-.009	-.007	-.017	-.051	-.147
50.00	-.327	.096	-.070	-.060	.035	-.002	-.172
55.00	-.211	.154	.110	-.129	.091	.046	-.214
60.00	.045	.118	.126	.197	.137	.084	-.235
65.00	.188	.129	.121	.187	.171	.099	-.258
70.00	.413	.011	.145	.197	.187	.100	-.252
75.00	-1.252	-1.010	-.617	-.496	-.440	-.337	-.245
80.00	-.732	-1.032	-.628	-.501	-.435	-.332	-.235
85.00	-.476	-.940	-.633	-.507	-.430	-.324	-.237
90.00	-.438	-.850	-.634	-.509	-.427	-.319	-.231
95.00	-.400	-.679	-.623	-.504	-.419	-.310	-.222

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.420	.465	.443	.403	.416	.430	.395
2.50	.427	.396	.365	.308	.346	.359	.324
5.00	.397	.319	.284	.278	.258	.253	.237
7.50	.356	.271	.233	.235	.199	.199	.159
10.00	.316	.242	.198	.183	.161	.195	.103
15.00	.273	.179	.145	.114	.118	.105	.005
20.00	.211	.139	.093	.070	.065	.048	-.094
25.00	.203	.103	.057	.032	.027	.002	-.193
30.00	.142	.069	.021	.010	-.004	-.035	-.257
35.00	.111	.037	-.005	-.023	-.034	-.079	-.306
40.00	.088	.012	-.037	-.048	-.071	-.116	-.335
45.00	.057	-.021	-.061	-.068	-.105	-.168	-.347
50.00	.023	-.051	-.083	-.097	-.130	-.217	-.358
55.00	-.002	-.063	-.092	-.113	-.156	-.260	-.346
60.00	-.024	-.075	-.096	-.123	-.174	-.303	-.332
65.00	-.046	-.083	-.093	-.138	-.185	-.328	-.320
70.00	-.044						-.317
75.00	-.071	-.074	-.102	-.182	-.214	-.298	-.310
80.00	-.070	-.089	-.111	-.185	-.232	-.318	-.309
85.00	-.100	-.076	-.133	-.202	-.248	-.356	-.302
90.00	-.085	-.062	-.176	-.234	-.226	-.386	-.280
95.00	-.124	-.054	-.214	-.277	-.316	-.369	-.218

M = 0.98   α = 7.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.316	-.114	-.175	-.203	-.452	-.529	-.502
1.25	-.060	-1.053	-1.180	-1.164	-1.195	-1.051	-1.054
2.50	-.179	-1.052	-1.130	-1.200	-1.212	-1.080	-1.052
5.00	-.282	-.969	-1.126	-1.145	-1.157	-.998	-1.006
7.50	-.320	-.765	-1.061	-1.099	-1.115	-.965	-.964
10.00	-.318	-.671	-1.039	-1.073	-1.086	-.903	-.914
15.00	-.330	-.551	-.964	-1.027	-.979	-.709	-.790
20.00	-.317	-.484	-.672	-.903	-.747	-.495	-.702
25.00	-.332	-.446	-.487	-.582	-.563	-.475	-.629
30.00	-.334	-.427	-.340	-.444	-.409	-.461	-.584
35.00	-.330	-.426	-.170	-.344	-.339	-.439	-.537
40.00	-.338	-.434	-.102	-.217	-.287	-.409	-.504
45.00	-.350	-.201	-.059	-.080	-.242	-.392	-.460
50.00	-.390	.015	-.020	.012	-.203	-.375	-.427
55.00	-.293	.101	.016	.083	-.178	-.354	-.408
60.00	-.128	.089	.036	.176	-.153	-.345	-.392
65.00	.108	-.100	.042	.182	-.140	-.288	-.382
70.00	.360	-.004	.073	.199	-.099	-.448	-.377
75.00	-1.250	-1.014	-.639	-.516	-.500	-.440	-.356
80.00	-.779	-1.027	-.658	-.520	-.519	-.412	-.334
85.00	-.472	-.943	-.660	-.526	-.514	-.382	-.315
90.00	-.389	-.849	-.654	-.524	-.501	-.353	-.300
95.00	-.430	-.708	-.637	-.520	-.482	-.396	-.278

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.452	.543	.505	.465	.465	.463	.425
2.50	.490	.476	.436	.383	.407	.407	.362
5.00	.465	.402	.359	.348	.325	.310	.278
7.50	.444	.349	.301	.304	.269	.250	.203
10.00	.401	.317	.269	.255	.228	.251	.144
15.00	.353	.251	.215	.187	.177	.159	.044
20.00	.287	.208	.160	.144	.122	.100	-.037
25.00	.272	.165	.121	.102	.081	.051	-.155
30.00	.208	.126	.087	.072	.042	.008	-.223
35.00	.172	.095	.055	.037	.010	-.039	-.272
40.00	.145	.070	.024	.000	-.025	-.080	-.305
45.00	.110	.033	.000	-.025	-.062	-.127	-.334
50.00	.079	.009	-.040	-.048	-.090	-.175	-.353
55.00	.053	-.004	-.045	-.071	-.120	-.222	-.371
60.00	.025	-.022	-.049	-.087	-.142	-.263	-.366
65.00	.007	-.031		-.104	-.154	-.293	-.361
70.00	-.004						-.364
75.00	-.023	-.026	-.088	-.152	-.187	-.258	-.349
80.00	-.019	-.044	-.094	-.165	-.204	-.285	-.340
85.00	-.044	-.033	-.117	-.184	-.224	-.332	-.332
90.00	-.044	-.051	-.163	-.217	-.208	-.384	-.312
95.00	-.085	-.064	-.207	-.262	-.300	-.396	-.238

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 0.98   α = 11.4°

UPPER SURFACE

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.291	-.453	-.496	-.050	-.759	-.850	-.742
1.25	-.185	-1.112	-1.120	-1.263	-1.223	-.901	-.714
2.50	-.327	-1.096	-1.051	-1.277	-1.214	-.910	-.708
5.00	-.448	-1.121	-1.004	-1.228	-1.197	-.881	-.699
7.50	-.494	-1.093	-.925	-1.196	-1.167	-.894	-.691
10.00	-.488	-1.031	-.876	-1.160	-1.130	-.887	-.682
15.00	-.496	-.939	-.820	-1.036	-1.006	-.877	-.663
20.00	-.463	-.889	-.747	-.797	-.877	-.865	-.640
25.00	-.449	-.820	-.656	-.763	-.841	-.834	-.612
30.00	-.441	-.716	-.573	-.744	-.811	-.836	-.589
35.00	-.424	-.582	-.496	-.723	-.788	-.816	-.565
40.00	-.424	-.473	-.438	-.690	-.763	-.792	-.543
45.00	-.433	-.427	-.452	-.637	-.745	-.761	-.524
50.00	-.465	-.047	-.535	-.571	-.724	-.728	-.508
55.00	-.382	.066	-.583	-.498	-.709	-.693	-.490
60.00	-.233	.085	-.601	-.389	-.689	-.654	-.471
65.00	-.083	.132	-.646	-.408	-.659	-.619	-.465
70.00	-.223	-.030	-.590	-.358	-.607	-.579	-.450
75.00	-1.041	-.980	-.750	-.557	-.611	-.567	-.448
80.00	-.770	-.980	-.696	-.554	-.632	-.567	-.440
85.00	-.473	-.902	-.614	-.536	-.616	-.555	-.433
90.00	-.442	-.814	-.583	-.509	-.585	-.529	-.421
95.00	-.433	-.694	-.563	-.475	-.553	-.501	-.409

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.451	.634	.573	.593	.510	.494	.466
2.50	.569	.598	.542	.508	.486	.475	.427
5.00	.716	.531	.481	.471	.420	.402	.361
7.50	.605	.480	.433	.417	.370	.346	.295
10.00	.567	.448	.399	.367	.324	.336	.233
15.00	.518	.379	.342	.305	.277	.252	.138
20.00	.438	.332	.289	.259	.222	.193	.009
25.00	.407	.287	.244	.212	.177	.146	-.048
30.00	.352	.248	.211	.182	.138	.101	-.122
35.00	.296	.216	.178	.147	.103	.055	-.175
40.00	.272	.185	.147	.109	.065	.009	-.208
45.00	.235	.148	.117	.074	.025	.041	-.239
50.00	.182	.117	.088	.043	.007	-.089	-.269
55.00	.175	.100	.066	.016	-.042	-.134	-.288
60.00	.138	.080	.050	-.009	-.063	-.176	-.291
65.00	.123	.066	.029	-.037	-.080	-.210	-.307
70.00	.100						-.311
75.00	.047	.063	-.020	-.102	-.118	-.198	-.311
80.00	.056	.035	-.033	-.100	-.143	-.223	-.322
85.00	.055	.006	-.066	-.124	-.164	-.275	-.340
90.00	.024	-.016	-.111	-.161	-.160	-.324	-.351
95.00	.020	-.067	-.159	-.209	-.251	-.354	-.360

M = 0.98   α = 15.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.196	-.814	-.912	-.698	-.695	-.642	-.607
1.25	-.316	-1.235	-1.172	-.903	-.678	-.659	-.586
2.50	-.521	-1.206	-1.092	-.901	-.670	-.645	-.581
5.00	-.691	-1.233	-1.126	-.888	-.653	-.619	-.574
7.50	-.732	-1.232	-1.111	-.893	-.641	-.629	-.575
10.00	-.719	-1.214	-1.120	-.899	-.631	-.626	-.574
15.00	-.712	-1.149	-1.122	-.928	-.629	-.627	-.574
20.00	-.659	-1.142	-1.092	-.979	-.645	-.631	-.569
25.00	-.618	-1.121	-1.054	-1.035	-.687	-.619	-.570
30.00	-.584	-1.103	-1.015	-1.053	-.713	-.630	-.574
35.00	-.553	-1.092	-.983	-1.052	-.719	-.621	-.577
40.00	-.543	-1.034	-.962	-1.034	-.723	-.614	-.577
45.00	-.545	-.741	-.970	-.974	-.719	-.610	-.576
50.00	-.565	-.284	-1.012	-.903	-.713	-.602	-.575
55.00	-.488	-.106	-1.091	-.847	-.704	-.595	-.573
60.00	-.391	-.099	-1.149	-.711	-.700	-.589	-.571
65.00	-.280	-.357	-1.086	-.773	-.687	-.582	-.575
70.00	-.078	-.115	-.992	-.733	-.626	-.581	-.143
75.00	-1.062	-1.048	-.963	-.723	-.629	-.581	-.566
80.00	-.831	-1.030	-.988	-.765	-.650	-.582	-.564
85.00	-.620	-.944	-.854	-.793	-.647	-.580	-.559
90.00	-.591	-.846	-.750	-.755	-.637	-.578	-.552
95.00	-.523	-.673	-.668	-.691	-.625	-.573	-.537

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.395	.678	.583	.600	.519	.490	.461
2.50	.585	.694	.614	.579	.547	.530	.476
5.00	.734	.661	.583	.565	.516	.489	.439
7.50	.777	.616	.547	.520	.475	.443	.378
10.00	.726	.584	.518	.481	.439	.436	.327
15.00	.667	.519	.466	.424	.391	.361	.243
20.00	.583	.472	.413	.380	.340	.307	.154
25.00	.548	.428	.368	.336	.298	.255	.060
30.00	.493	.385	.334	.300	.256	.213	-.013
35.00	.434	.348	.298	.260	.216	.164	-.072
40.00	.405	.315	.262	.223	.185	.119	-.120
45.00	.366	.279	.232	.188	.140	.068	-.153
50.00	.313	.244	.194	.148	.109	.018	-.192
55.00	.304	.222	.171	.119	.077	-.029	-.215
60.00	.263	.200	.145	.090	.049	-.069	-.234
65.00	.251	.180	.119	.063	.030	-.109	-.259
70.00	.212						-.276
75.00	.145	.155	.041	-.010	-.026	-.143	-.296
80.00	.150	.119	.036	-.008	-.057	-.183	-.315
85.00	.150	.081	-.004	-.026	-.092	-.236	-.348
90.00	.080	.034	-.046	-.073	-.096	-.279	-.374
95.00	.047	-.030	-.095	-.133	-.200	-.322	-.412

TABLE II — WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 1.00 α = 0.0°							
Upper Surface							
.00	.410	.583	.518	.821	.511	.494	.438
1.25	.291	-.007	-.051	.028	.138	.162	.123
2.50	.226	.006	-.029	.028	.056	.038	.082
5.00	.159	.006	-.024	.033	.048	.067	.045
7.50	.115	-.013	-.015	.058	.022	.031	.011
10.00	.096	-.025	-.012	.045	.000	.019	-.016
15.00	.052	-.045	-.004	.016	.002	.017	-.070
20.00	.025	-.059	-.029	.020	.000	.006	-.154
25.00	-.010	-.079	-.046	.023	-.009	.001	-.160
30.00	-.030	-.086	-.058	.031	-.022	-.008	-.126
35.00	-.035	-.005	-.077	.050	-.044	-.021	-.091
40.00	-.056	-.078	-.102	.072	-.072	-.033	-.065
45.00	-.070	-.164	-.141	.113	-.111	-.058	-.084
50.00	-.042	-.262	-.206	.173	-.174	-.107	-.139
55.00	.079	-.353	-.285	.259	-.260	-.189	-.234
60.00	.251	-.346	-.328	.355	-.312	-.237	-.279
65.00	.421	-.356	-.324	.348	-.318	-.219	-.305
70.00	.631	-.300	-.341	.361	-.325	-.216	-.296
75.00	-1.148	-.936	-.580	-.464	-.466	-.378	-.272
80.00	-.648	-1.001	-.581	-.471	-.473	-.372	-.261
85.00	-.568	-.923	-.599	-.482	-.483	-.369	-.268
90.00	-.405	-.859	-.609	-.487	-.499	-.362	-.280
95.00	-.317	-.580	-.587	-.483	-.510	-.353	-.277
Lower Surface							
1.25	.269	.002	-.032	-.092	-.236	-.303	-.402
2.50	.220	-.025	-.016	-.082	-.163	-.227	-.294
5.00	.173	-.020	-.026	-.031	-.166	-.228	-.241
7.50	.120	-.002	-.048	-.069	-.182	-.230	-.264
10.00	.096	-.018	-.057	-.094	-.195	-.180	-.281
15.00	.059	-.045	-.084	-.145	-.204	-.241	-.285
20.00	.005	-.065	-.111	-.169	-.224	-.273	-.327
25.00	-.023	-.083	-.136	-.198	-.255	-.293	-.356
30.00	-.039	-.108	-.159	-.211	-.272	-.311	-.357
35.00	-.051	-.131	-.181	-.239	-.286	-.337	-.341
40.00	-.064	-.144	-.206	-.263	-.308	-.361	-.368
45.00	-.089	-.171	-.233	-.289	-.347	-.394	-.391
50.00	-.111	-.199	-.258	-.319	-.369	-.418	-.397
55.00	-.144	-.209	-.265	-.332	-.385	-.462	-.423
60.00	-.166	-.217	-.270	-.331	-.389	-.483	-.427
65.00	-.179	-.211	-.262	-.319	-.360	-.437	-.383
70.00	-.179						-.358
75.00	-.197	-.228	-.284	-.305	-.322	-.312	-.315
80.00	-.199	-.239	-.248	-.264	-.312	-.305	-.295
85.00	-.217	-.226	-.206	-.261	-.311	-.307	-.298
90.00	-.220	-.194	-.219	-.280	-.268	-.310	-.290
95.00	-.225	-.122	-.247	-.306	-.336	-.327	-.276
M = 1.00 α = 3.9°							
Upper Surface							
.00	.376	.323	.220	.446	.077	.082	.165
1.25	.135	-.733	-.855	-.835	-.752	-.797	-.857
2.50	.042	-.677	-.784	-.895	-.692	-.817	-.802
5.00	-.038	-.256	-.572	-.799	-.469	-.659	-.662
7.50	-.074	-.254	-.311	-.605	-.348	-.331	-.469
10.00	-.074	-.240	-.312	-.350	-.278	-.276	-.274
15.00	-.108	-.230	-.311	-.137	-.230	-.247	-.237
20.00	-.116	-.234	-.304	-.110	-.203	-.192	-.231
25.00	-.149	-.234	-.233	-.093	-.169	-.148	-.150
30.00	-.170	-.240	-.048	-.066	-.126	-.116	-.103
35.00	-.164	-.256	-.004	-.044	-.076	-.071	-.089
40.00	-.178	-.211	-.031	-.007	-.023	-.029	-.081
45.00	-.199	-.092	-.075	-.045	-.036	-.020	-.095
50.00	-.239	-.211	-.131	-.110	-.101	-.077	-.133
55.00	-.115	-.237	-.165	-.164	-.161	-.114	-.193
60.00	-.073	-.164	-.174	-.216	-.192	-.126	-.231
65.00	-.268	-.131	-.166	-.196	-.200	-.117	-.255
70.00	-.476	-.075	-.191	-.206	-.212	-.101	-.253
75.00	-1.198	-.985	-.596	-.491	-.445	-.381	-.238
80.00	-.655	-1.028	-.614	-.499	-.445	-.367	-.232
85.00	-.481	-.917	-.619	-.509	-.442	-.352	-.237
90.00	-.426	-.802	-.616	-.516	-.439	-.337	-.242
95.00	-.371	-.601	-.601	-.514	-.440	-.328	-.244
Lower Surface							
1.25	.390	.379	.364	.331	.340	.331	.307
2.50	.377	.311	.286	.254	.269	.256	.234
5.00	.341	.247	.215	.206	.180	.152	.158
7.50	.288	.203	.168	.156	.126	.103	.091
10.00	.255	.171	.135	.114	.088	.114	.042
15.00	.217	.125	.089	.047	.050	.032	-.055
20.00	.153	.090	.041	.010	.004	.012	-.143
25.00	.154	.055	.003	-.028	-.046	-.050	-.225
30.00	.097	.024	-.028	-.051	-.071	-.081	-.266
35.00	.068	-.005	-.054	-.081	-.095	-.119	-.289
40.00	.053	-.027	-.083	-.107	-.122	-.149	-.300
45.00	.020	-.064	-.107	-.137	-.138	-.192	-.297
50.00	-.012	-.096	-.141	-.159	-.145	-.246	-.308
55.00	-.036	-.103	-.149	-.163	-.169	-.288	-.321
60.00	-.061	-.113	-.151	-.162	-.186	-.321	-.308
65.00	-.085	-.124	-.149	-.147	-.197	-.343	-.301
70.00	-.081						-.302
75.00	-.106	-.129	-.115	-.172	-.226	-.270	-.298
80.00	-.111	-.132	-.111	-.177	-.231	-.290	-.303
85.00	-.132	-.125	-.116	-.192	-.242	-.321	-.309
90.00	-.121	-.103	-.158	-.223	-.213	-.348	-.305
95.00	-.160	-.042	-.197	-.263	-.299	-.351	-.281

TABLE II

WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 1.00   α = 5.9°

UPPER SURFACE

PERCENT CHORD	\[PRESSURE COEFFICIENT, P, AT:\] 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.365	.135	.032	-.344	-.191	-.249	-.166
1.25	.051	-.927	-1.004	-.979	-.999	-.989	-1.039
2.50	-.051	-.891	-.976	-1.029	-1.029	-1.063	-1.036
5.00	-.145	-.626	-.939	-.963	-.965	-.976	-.939
7.50	-.179	-.410	-.858	-.915	-.925	-.942	-.920
10.00	-.179	-.362	-.806	-.871	-.901	-.902	-.893
15.00	-.203	-.330	-.406	-.816	-.803	-.663	-.611
20.00	-.195	-.316	-.354	-.369	-.415	-.277	-.234
25.00	-.221	-.317	-.368	-.155	-.142	-.209	-.149
30.00	-.234	-.319	-.208	+.112	-.119	-.184	-.128
35.00	-.236	-.325	-.073	-.080	-.083	-.143	-.124
40.00	-.243	-.331	-.018	-.037	-.041	-.094	-.125
45.00	-.259	-.044	-.034	-.022	-.003	-.043	-.139
50.00	-.304	.123	.091	.085	.055	.011	-.172
55.00	-.207	.177	.129	.152	.108	.057	-.223
60.00	-.035	.126	.145	.218	.157	.093	-.255
65.00	.208	.119	.138	.205	.192	.114	-.277
70.00	.426	.034	.163	.215	.214	.105	-.279
75.00	-1.202	-.995	-.615	-.505	-.476	-.403	-.276
80.00	-.699	-1.012	-.632	-.510	-.479	-.391	-.272
85.00	-.440	-.913	-.633	-.524	-.475	-.377	-.272
90.00	-.407	-.814	-.627	-.529	-.476	-.365	-.272
95.00	-.373	-.653	-.612	-.525	-.479	-.356	-.264

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.433	.486	.460	.433	.420	.430	.411
2.50	.441	.410	.385	.329	.351	.359	.333
5.00	.398	.340	.304	.302	.265	.255	.254
7.50	.371	.288	.252	.256	.207	.200	.182
10.00	.336	.260	.218	.205	.169	.200	.124
15.00	.288	.199	.166	.132	.124	.114	.032
20.00	.229	.159	.116	.098	.072	.058	-.070
25.00	.219	.118	.077	.053	.035	.012	-.167
30.00	.162	.087	.044	.026	.010	-.021	-.225
35.00	.128	.053	.016	-.005	-.022	-.062	-.274
40.00	.107	.029	-.018	-.034	-.051	-.099	-.304
45.00	.074	-.005	-.041	-.059	-.091	-.143	-.324
50.00	.040	-.033	-.072	-.078	-.113	-.195	-.338
55.00	.009	-.043	-.077	-.085	-.139	-.235	-.328
60.00	-.011	-.060	-.078	-.087	-.158	-.279	-.308
65.00	-.034	-.068	-.078	-.108	-.170	-.306	-.294
70.00	-.033						-.294
75.00	-.065	-.070	-.070	-.151	-.196	-.279	-.291
80.00	-.057	-.076	-.080	-.155	-.208	-.300	-.295
85.00	-.086	-.070	-.098	-.171	-.223	-.314	-.307
90.00	-.079	-.061	-.140	-.202	-.203	-.378	-.309
95.00	-.111	-.041	-.182	-.245	-.291	-.377	-.289

M = 1.00   α = 7.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.364	-.053	-.125	-.255	-.395	-.470	-.433
1.25	-.019	-1.018	-1.116	-1.092	-1.131	-1.062	-1.088
2.50	-.134	-1.002	-1.069	-1.131	-1.152	-1.139	-1.086
5.00	-.235	-.931	-1.068	-1.074	-1.101	-1.048	-1.019
7.50	-.277	-.696	-1.001	-1.033	-1.059	-1.036	-.984
10.00	-.275	-.571	-.987	-1.004	-1.031	-.980	-.935
15.00	-.286	-.467	-.921	-.967	-.972	-.788	-.752
20.00	-.274	-.422	-.659	-.900	-.772	-.580	-.583
25.00	-.287	-.397	-.467	-.581	-.558	-.463	-.488
30.00	-.290	-.383	-.355	-.396	-.351	-.436	-.456
35.00	-.290	-.386	-.147	-.296	-.280	-.414	-.443
40.00	-.296	-.395	-.069	-.178	-.231	-.390	-.431
45.00	-.307	-.177	-.021	-.048	-.190	-.365	-.424
50.00	-.349	-.041	-.031	-.046	-.151	-.341	-.416
55.00	-.270	-.123	-.070	-.117	-.120	-.322	-.409
60.00	-.105	-.098	-.098	-.207	-.097	-.299	-.404
65.00	-.139	-.107	-.108	-.213	-.080	-.299	-.400
70.00	-.389	-.025	-.134	-.227	-.039	-.246	-.403
75.00	-1.181	-.975	-.632	-.504	-.517	-.483	-.391
80.00	-.717	-.982	-.649	-.509	-.537	-.474	-.375
85.00	-.439	-.895	-.647	-.515	-.541	-.456	-.361
90.00	-.348	-.800	-.638	-.519	-.527	-.433	-.349
95.00	-.402	-.666	-.618	-.511	-.512	-.407	-.334

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.475	.561	.519	.484	.474	.469	.444
2.50	.509	.499	.453	.396	.415	.412	.376
5.00	.488	.422	.372	.361	.333	.315	.300
7.50	.467	.369	.321	.318	.277	.258	.229
10.00	.425	.338	.288	.267	.233	.258	.170
15.00	.380	.272	.232	.201	.189	.169	.078
20.00	.315	.226	.181	.159	.135	.115	-.017
25.00	.295	.191	.137	.115	.093	.063	-.120
30.00	.236	.155	.104	.089	.058	.025	-.190
35.00	.200	.120	.077	.055	.025	.021	-.242
40.00	.168	.094	.044	.028	.007	-.053	-.280
45.00	.141	.060	.019	-.002	-.042	-.104	-.305
50.00	.107	.027	-.009	-.029	-.069	-.153	-.328
55.00	.077	.012	-.019	-.047	-.102	-.201	-.341
60.00	.053	-.004	-.026	-.060	-.121	-.238	-.337
65.00	.032	-.013	-.034	-.083	-.133	-.269	-.334
70.00	.028						-.337
75.00	-.015	-.003	-.052	-.124	-.164	-.253	-.330
80.00	-.001	-.020	-.064	-.136	-.181	-.274	-.328
85.00	-.012	-.021	-.087	-.152	-.201	-.316	-.330
90.00	-.017	-.026	-.130	-.184	-.184	-.367	-.333
95.00	-.025	-.031	-.170	-.229	-.272	-.389	-.317

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.00   α = 11.4°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.303	-.421	-.453	-.008	-.713	-.811	-.732
1.25	-.158	-1.085	-1.088	-1.217	-1.203	-.969	-.790
2.50	-.299	-1.065	-1.031	-1.232	-1.197	-.972	-.785
5.00	-.420	-1.089	-.998	-1.190	-1.175	-.938	-.773
7.50	-.469	-1.059	-.916	-1.155	-1.145	-.956	-.769
10.00	-.462	-.995	-.857	-1.120	-1.104	-.943	-.759
15.00	-.470	-.903	-.799	-1.014	-.992	-.918	-.737
20.00	-.438	-.852	-.725	-.763	-.836	-.883	-.717
25.00	-.424	-.789	-.636	-.723	-.792	-.840	-.689
30.00	-.419	-.688	-.551	-.704	-.768	-.832	-.671
35.00	-.406	-.567	-.481	-.688	-.746	-.810	-.651
40.00	-.402	-.464	-.424	-.661	-.725	-.789	-.629
45.00	-.410	-.419	-.439	-.613	-.708	-.763	-.615
50.00	-.439	-.036	-.517	-.553	-.693	-.743	-.598
55.00	-.360	-.077	-.566	-.484	-.679	-.721	-.580
60.00	-.218	-.091	-.579	-.373	-.668	-.694	-.554
65.00	-.078	-.140	-.621	-.391	-.644	-.663	-.540
70.00	-.245	-.020	-.563	-.342	-.630	-.614	-.525
75.00	-1.033	-.957	-.735	-.548	-.618	-.610	-.515
80.00	-.747	-.957	-.691	-.548	-.642	-.606	-.504
85.00	-.451	-.877	-.600	-.534	-.629	-.596	-.496
90.00	-.425	-.795	-.568	-.507	-.604	-.576	-.486
95.00	-.423	-.676	-.542	-.489	-.574	-.550	-.476

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.458	.647	.581	.597	.518	.503	.477
2.50	.582	.606	.548	.516	.491	.484	.442
5.00	.781	.543	.488	.479	.426	.412	.377
7.50	.617	.492	.439	.428	.376	.352	.306
10.00	.568	.457	.406	.376	.333	.345	.250
15.00	.523	.389	.349	.315	.281	.260	.153
20.00	.443	.342	.298	.270	.233	.203	.049
25.00	.413	.296	.255	.227	.186	.153	-.036
30.00	.357	.261	.219	.191	.148	.109	-.106
35.00	.303	.223	.186	.155	.108	.064	-.164
40.00	.280	.193	.153	.122	.075	.020	-.198
45.00	.241	.156	.127	.086	.038	-.029	-.236
50.00	.191	.125	.096	.056	.006	-.078	-.266
55.00	.180	.104	.079	.028	-.028	-.125	-.290
60.00	.141	.085	.064	.005	-.050	-.163	-.293
65.00	.130	.074	.042	-.024	-.068	-.195	-.302
70.00	.101						-.308
75.00	.038	.071	-.004	-.085	-.107	-.185	-.314
80.00	.050	.045	-.018	-.085	-.133	-.230	-.325
85.00	.064	.019	-.049	-.107	-.152	-.274	-.340
90.00	.008	-.000	-.092	-.143	-.145	-.320	-.353
95.00	-.006	-.051	-.139	-.192	-.236	-.351	-.378

M = 1.03   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.679	.576	.513	.832	.551	.529	.468
1.25	.245	-.020	-.065	.037	.185	.242	.169
2.50	.191	-.009	-.047	.042	.101	.084	.133
5.00	.125	-.009	-.050	.055	.095	.109	.091
7.50	.083	-.028	-.055	.084	.067	.074	.049
10.00	.069	-.042	-.083	.075	.046	.064	.027
15.00	.035	-.059	-.090	.056	.043	.025	.017
20.00	.012	-.074	.042	.064	.043	.037	-.108
25.00	-.020	-.094	.089	.071	.051	.042	-.118
30.00	-.042	-.110	.089	.080	.063	.048	-.086
35.00	-.044	-.108	.112	.096	.083	.060	-.049
40.00	-.061	-.059	.145	.116	.112	.073	-.025
45.00	-.086	.228	.189	.155	.155	.097	-.041
50.00	-.109	.290	.256	.215	.214	.144	-.094
55.00	-.015	.388	.330	.294	.298	.225	-.190
60.00	.255	.432	.368	.369	.346	.267	-.245
65.00	.408	.421	.353	.364	.349	.248	-.269
70.00	.600	.369	.365	.376	.270	.243	-.260
75.00	-1.114	-.883	-.528	-.422	-.420	-.342	-.231
80.00	-.574	-.939	-.519	-.429	-.425	-.339	-.219
85.00	-.383	-.866	-.534	-.441	-.435	-.334	-.232
90.00	-.200	-.800	-.547	-.448	-.448	-.325	-.243
95.00	-.124	-.602	-.534	-.442	-.457	-.316	-.243

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.220	-.013	-.033	-.043	-.203	-.273	-.368
2.50	.184	-.005	-.021	-.045	-.129	-.193	-.265
5.00	.126	-.005	-.034	-.004	-.129	-.195	-.203
7.50	.088	-.014	-.049	-.038	-.145	-.194	-.231
10.00	.067	-.030	-.059	-.062	-.157	-.146	-.247
15.00	.039	-.056	-.085	-.114	-.166	-.204	-.259
20.00	.008	-.076	-.112	-.137	-.187	-.237	-.290
25.00	-.009	-.092	-.131	-.166	-.216	-.257	-.307
30.00	-.039	-.106	-.153	-.180	-.234	-.272	-.315
35.00	-.062	-.133	-.166	-.206	-.253	-.296	-.329
40.00	-.067	-.145	-.192	-.235	-.275	-.321	-.342
45.00	-.091	-.174	-.218	-.260	-.308	-.357	-.352
50.00	-.119	-.205	-.242	-.282	-.333	-.385	-.360
55.00	-.141	-.211	-.248	-.298	-.356	-.426	-.388
60.00	-.165	-.220	-.249	-.298	-.350	-.447	-.389
65.00	-.184	-.217	-.249	-.296	-.339	-.433	-.384
70.00	-.183						-.351
75.00	-.201	-.223	-.261	-.279	-.286	-.294	-.275
80.00	-.199	-.223	-.224	-.224	-.270	-.278	-.277
85.00	-.214	-.202	-.177	-.219	-.268	-.290	-.273
90.00	-.214	-.176	-.188	-.234	-.232	-.296	-.256
95.00	-.208	-.113	-.209	-.269	-.293	-.293	-.245

TABLE II   WING WITH UPPER SURFACE SPOILER (NO GAP)

M = 1.03   α = 3.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.547	.353	.246	.482	.123	.106	.202
1.25	.114	-.713	-.785	-.767	-.761	-.722	-.782
2.50	.029	-.644	-.743	-.823	-.792	-.732	-.734
5.00	-.056	-.259	-.634	-.742	-.715	-.537	-.603
7.50	-.092	-.249	-.307	-.645	-.616	-.296	-.440
10.00	-.098	-.235	-.297	-.419	-.310	-.246	-.241
15.00	-.121	-.228	-.297	-.281	-.084	-.217	-.194
20.00	-.125	-.224	-.292	-.093	-.091	-.165	-.186
25.00	-.150	-.227	-.292	-.073	-.082	-.118	-.100
30.00	-.162	-.231	-.062	-.040	-.059	-.082	-.056
35.00	-.162	-.244	-.012	-.009	-.025	-.036	-.043
40.00	-.175	-.251	-.049	-.035	-.022	-.008	-.036
45.00	-.194	.083	.090	.092	.078	.056	-.049
50.00	-.227	.217	.138	.156	.144	.107	-.086
55.00	-.165	.235	.166	.204	.208	.149	-.155
60.00	-.068	.135	.178	.254	.239	.166	-.196
65.00	-.264	-.114	.174	.237	.246	.160	-.227
70.00	-.469	-.112	.204	.248	-.416	.150	-.229
75.00	-1.128	-.914	-.551	-.453	-.416	-.350	-.217
80.00	-.644	-.944	-.570	-.457	-.415	-.338	-.207
85.00	-.414	-.845	-.566	-.472	-.414	-.323	-.211
90.00	-.334	-.738	-.556	-.478	-.417	-.310	-.216
95.00	-.309	-.580	-.538	-.471	-.420	-.301	-.215

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.324	.366	.360	.346	.353	.374	.341
2.50	.336	.304	.290	.269	.285	.299	.269
5.00	.325	.241	.217	.223	.201	.195	.200
7.50	.273	.198	.170	.174	.148	.147	.131
10.00	.237	.167	.142	.133	.111	.151	.086
15.00	.206	.125	.098	.068	.080	.070	.011
20.00	.149	.089	.054	.035	.029	.022	-.100
25.00	.149	.057	.018	-.000	-.008	-.008	-.180
30.00	.097	.029	-.013	-.024	-.035	-.036	-.227
35.00	.071	.000	-.041	-.056	-.063	-.075	-.255
40.00	.053	-.018	-.066	-.077	-.083	-.107	-.257
45.00	.024	-.052	-.089	-.105	-.108	-.148	-.257
50.00	-.005	-.078	-.116	-.125	-.106	-.198	-.267
55.00	-.028	-.091	-.124	-.130	-.122	-.243	-.281
60.00	-.050	-.098	-.121	-.128	-.140	-.278	-.267
65.00	-.073	-.113	-.123	-.113	-.154	-.299	-.261
70.00	-.073						-.259
75.00	-.099	-.106	-.077	-.121	-.178	-.259	-.257
80.00	-.099	-.112	-.079	-.125	-.186	-.270	-.265
85.00	-.105	-.098	-.077	-.140	-.197	-.290	-.269
90.00	-.105	-.077	-.111	-.165	-.175	-.306	-.272
95.00	-.106	-.018	-.148	-.209	-.257	-.311	-.256

M = 1.03   α = 5.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.508	.182	.071	.382	.139	.190	.123
1.25	-.061	-.879	-.930	-.908	-.926	-.923	-.970
2.50	-.032	-.833	-.908	-.962	-.964	-.984	-.962
5.00	-.127	-.766	-.876	-.898	-.910	-.895	-.874
7.50	-.171	-.381	-.802	-.852	-.867	-.868	-.851
10.00	-.175	-.314	-.770	-.812	-.835	-.837	-.833
15.00	-.195	-.296	-.479	-.775	-.767	-.715	-.627
20.00	-.190	-.293	-.322	-.583	-.546	-.321	-.229
25.00	-.209	-.291	-.340	-.153	-.128	-.172	-.136
30.00	-.219	-.291	-.280	-.079	-.064	-.137	-.124
35.00	-.218	-.297	-.055	-.040	-.031	-.097	-.120
40.00	-.223	-.314	-.006	-.001	-.007	-.048	-.106
45.00	-.239	-.033	.060	.008	.049	-.004	-.106
50.00	-.278	.152	.116	.122	.095	.043	-.128
55.00	-.222	.191	.150	.187	.146	.085	-.177
60.00	-.021	.125	.166	.252	.192	.121	-.211
65.00	-.224	-.111	.160	.240	.229	.133	-.243
70.00	-.438	-.070	.190	.252	-.412	.128	-.247
75.00	-1.126	-.912	-.572	-.467	-.436	-.364	-.248
80.00	-.674	-.931	-.591	-.477	-.437	-.352	-.245
85.00	-.396	-.840	-.588	-.485	-.440	-.338	-.244
90.00	-.326	-.744	-.574	-.492	-.445	-.329	-.244
95.00	-.310	-.600	-.557	-.487	-.445	-.321	-.239

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.379	.486	.468	.449	.451	.461	.432
2.50	.420	.416	.395	.344	.383	.390	.360
5.00	.393	.348	.317	.320	.298	.288	.287
7.50	.378	.298	.267	.278	.243	.235	.211
10.00	.341	.275	.235	.228	.202	.232	.159
15.00	.304	.212	.184	.159	.163	.148	.064
20.00	.237	.170	.138	.116	.111	.093	-.070
25.00	.235	.139	.101	.080	.075	.044	-.121
30.00	.178	.107	.070	.056	.047	.014	-.187
35.00	.147	.077	.042	.025	.020	-.025	-.234
40.00	.123	.058	.012	.006	.009	-.061	-.264
45.00	.096	.025	-.012	-.023	-.048	-.104	-.284
50.00	.066	-.002	-.036	-.040	-.073	-.151	-.298
55.00	.041	-.013	-.048	-.051	-.097	-.192	-.291
60.00	.012	-.024	-.047	-.055	-.115	-.232	-.270
65.00	-.002	-.039	-.047	-.069	-.127	-.259	-.260
70.00	-.002						-.256
75.00	-.047	-.034	-.036	-.110	-.151	-.239	-.252
80.00	-.043	-.038	-.039	-.117	-.161	-.269	-.257
85.00	-.036	-.035	-.055	-.136	-.175	-.305	-.276
90.00	-.065	-.017	-.098	-.160	-.159	-.331	-.277
95.00	-.056	-.000	-.138	-.200	-.240	-.334	-.263

TABLE II WING WITH UPPER SURFACE SPOILER (NO GAP)

| | PERCENT CHORD | PRESSURE COEFFICIENT, P, AT: | | | | | | |
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
	M = 1.03 α = 7.8°							
UPPER SURFACE	.00	.470	-.009	-.082	.297	-.339	-.411	-.377
	1.25	.009	-1.002	-1.043	+1.025	-1.047	-1.000	-1.038
	2.50	-.093	-.974	-.999	-1.062	-1.066	-1.062	-1.038
	5.00	-.199	-.935	-.999	-1.007	-1.019	-.977	-.968
	7.50	-.246	-.827	-.936	-.968	-.980	-.965	-.948
	10.00	-.251	-.603	-.922	-.940	-.958	-.920	-.908
	15.00	-.268	-.409	-.871	-.903	-.897	-.763	-.764
	20.00	-.253	-.359	-.722	-.856	-.730	-.551	-.562
	25.00	-.266	-.347	-.473	-.586	-.512	-.427	-.420
	30.00	-.269	-.339	-.379	-.405	-.314	-.391	-.380
	35.00	-.265	-.346	-.152	-.305	-.245	-.370	-.372
	40.00	-.267	-.355	-.045	-.197	-.208	-.352	-.371
	45.00	-.280	-.160	-.019	-.051	-.176	-.333	-.373
	50.00	-.316	.081	.082	.077	-.146	-.316	-.376
	55.00	-.264	.148	.121	.160	-.125	-.300	-.376
	60.00	-.084	.103	.142	.249	-.110	-.283	-.373
	65.00	.151	-.105	.142	.254	-.101	-.279	-.372
	70.00	.430	-.037	.171	.270	-.110	-.225	-.368
	75.00	-1.092	-.898	-.580	-.450	-.485	-.446	-.356
	80.00	-.685	-.910	-.601	-.457	-.511	-.437	-.346
	85.00	-.388	-.826	-.598	-.462	-.505	-.419	-.326
	90.00	-.302	-.735	-.582	-.463	-.487	-.393	-.314
	95.00	-.337	-.609	-.563	-.461	-.469	-.373	-.305
LOWER SURFACE	1.25	.418	.575	.537	.515	.506	.501	.473
	2.50	.499	.509	.467	.428	.448	.443	.412
	5.00	.491	.441	.394	.398	.368	.349	.334
	7.50	.486	.388	.348	.350	.313	.293	.263
	10.00	.447	.360	.314	.299	.274	.293	.208
	15.00	.402	.296	.261	.233	.226	.207	.117
	20.00	.334	.251	.210	.193	.174	.150	-.003
	25.00	.319	.215	.170	.152	.132	.103	-.077
	30.00	.261	.179	.135	.123	.101	.065	-.150
	35.00	.225	.147	.108	.090	.067	.019	-.200
	40.00	.199	.123	.078	.063	.031	-.017	-.231
	45.00	.166	.087	.053	.035	-.003	-.060	-.266
	50.00	.136	.062	.029	.007	-.030	-.108	-.294
	55.00	.107	.049	.018	-.008	-.057	-.151	-.306
	60.00	.078	.030	.016	-.022	-.078	-.189	-.305
	65.00	.065	.019	.009	-.047	-.089	-.221	-.301
	70.00	.052						-.302
	75.00	-.005	.031	-.016	-.085	-.119	-.231	-.297
	80.00	-.010	.019	-.026	-.094	-.134	-.247	-.295
	85.00	-.020	.016	-.051	-.115	-.152	-.280	-.296
	90.00	-.017	.018	-.091	-.143	-.138	-.324	-.301
	95.00	-.018	.000	-.130	-.186	-.223	-.341	-.285

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.60, α = 0.0° — UPPER SURFACE							
.00	.220	.482	.439	.692	.441	.424	.315
1.25	.059	-.064	-.002	.074	.189	.276	.172
2.50	.042	-.058	-.006	.051	.103	.131	.117
5.00	.028	-.054	-.009	.027	.075	.102	.058
7.50	.005	-.061	-.006	.027	.048	.070	.020
10.00	-.013	-.072	-.033	.023	.034	.058	-.006
15.00	-.036	-.074	-.033	.004	.030	.031	-.026
20.00	-.058	-.076	-.027	-.010	.026	.036	-.042
25.00	-.072	-.072	-.023	-.021	.031	.036	-.035
30.00	-.074	-.062	-.011	.030	.041	.036	-.034
35.00	-.066	-.044	.011	.048	.056	.053	-.034
40.00	-.070	-.013	.053	.073	.090	.069	-.026
45.00	-.064	.037	.090	.108	.123	.100	-.030
50.00	-.050	.116	.154	.166	.173	.146	-.039
55.00	-.000	.228	.246	.240	.252	.209	-.031
60.00	.094	.296	.316	.334	.320	.271	-.031
65.00	.180	.278	.309	.335	.313	.253	-.050
70.00	.312	.240	.322	.343	.320	.244	-.040
75.00	-.556	-.661	-.327	-.287	-.230	-.154	-.052
80.00	-.509	-.727	-.338	-.284	-.230	-.143	-.072
85.00	-.395	-.693	-.353	-.288	-.232	-.134	-.087
90.00	-.247	-.622	-.372	-.293	-.234	-.124	-.080
95.00	-.158	-.502	-.362	-.299	-.238	-.121	
M = 0.60, α = 0.0° — LOWER SURFACE							
1.25	-.125	-.144	-.223	-.295	-.411	-.471	-.491
2.50	-.069	-.109	-.158	-.213	-.286	-.307	-.347
5.00	-.027	-.101	-.145	-.132	-.231	-.263	-.256
7.50	-.007	-.112	-.149	-.150	-.223	-.230	-.245
10.00	-.031	-.122	-.154	-.163	-.211	-.192	-.233
15.00	-.062	-.141	-.168	-.192	-.207	-.207	-.219
20.00	-.095	-.153	-.182	-.194	-.212	-.219	-.218
25.00	-.081	-.160	-.192	-.205	-.219	-.218	-.178
30.00	-.124	-.172	-.200	-.209	-.226	-.216	-.178
35.00	-.138	-.190	-.210	-.217	-.227	-.218	-.178
40.00	-.149	-.200	-.222	-.223	-.231	-.218	-.191
45.00	-.157	-.219	-.226	-.228	-.238	-.216	-.168
50.00	-.204	-.236	-.233	-.234	-.240	-.213	-.162
55.00	-.190	-.234	-.232	-.234	-.241	-.208	-.155
60.00	-.207	-.247	-.227	-.233	-.232	-.201	-.130
65.00	-.239	-.278	-.242	-.234	-.210	-.178	-.117
70.00	-.273						-.121
75.00	-.191	.024	-.079	-.152	-.152	-.160	-.093
80.00	-.089	-.067	-.134	-.154	-.157	-.122	-.090
85.00	-.098	-.079	-.149	-.154	-.157	-.110	-.093
90.00	-.085	-.085	-.166	-.168	-.144	-.115	-.065
95.00	-.082	-.113	-.175	-.181	-.159	-.114	-.059
GAP		-.784	-.453	-.273	-.262	-.177	
M = 0.60, α = 4.0° — UPPER SURFACE							
.00	.195	-.134					.001
1.25	-.453	-.913					-.624
2.50	-.410	-.487					-.416
5.00	-.323	-.393					-.262
7.50	-.257	-.336					-.242
10.00	-.220	-.309					-.200
15.00	-.221	-.265					-.152
20.00	-.220	-.238					-.123
25.00	-.220	-.212					-.091
30.00	-.212	-.188					-.069
35.00	-.187	-.151					-.058
40.00	-.183	-.102					-.049
45.00	-.165	-.032					-.038
50.00	-.144	.062					-.028
55.00	-.067	.161					-.029
60.00	.015	.181					-.017
65.00	.096	.184					-.017
70.00	.211	.112					-.023
75.00	-.788	-.678					-.023
80.00	-.651	-.690					-.028
85.00	-.467	-.654					-.031
90.00	-.294	-.592					-.038
95.00	-.185	-.497					-.033
M = 0.60, α = 4.0° — LOWER SURFACE							
1.25	.310	.338					.245
2.50	.278	.256					.165
5.00	.238	.184					.092
7.50	.191	.134					.026
10.00	.153	.107					-.009
15.00	.121	.054					-.069
20.00	.072	.027					-.085
25.00	.066	-.005					-.088
30.00	.024	-.033					-.099
35.00	-.007	-.058					-.108
40.00	-.026	-.077					-.127
45.00	-.041	-.104					-.119
50.00	-.095	-.126					-.115
55.00	-.087	-.139					-.111
60.00	-.108	-.160					-.097
65.00	-.144	-.199					-.085
70.00	-.190						-.093
75.00	-.129	.081					-.069
80.00	-.025	.021					-.060
85.00	-.045	.042					-.063
90.00	-.046	.068					-.032
95.00	-.062	.111					-.023
GAP		-.775					

TABLE III　　　　WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.60　α = 6.0°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.158	-.815	-.874	-.290	-.896	-.949	-.738
1.25	-.588	-1.280	-1.165	-.759	-.919	-1.106	-1.086
2.50	-.533	-.922	-.918	-.699	-.754	-.689	-.686
5.00	-.474	-.691	-.753	-.629	-.613	-.518	-.504
7.50	-.398	-.570	-.593	-.543	-.523	-.450	-.428
10.00	-.349	-.496	-.509	-.479	-.449	-.390	-.326
15.00	-.330	-.403	-.400	-.374	-.334	-.306	-.211
20.00	-.318	-.350	-.310	-.296	-.257	-.237	-.165
25.00	-.306	-.307	-.249	-.230	-.200	-.175	-.121
30.00	-.289	-.266	-.194	-.175	-.147	-.132	-.092
35.00	-.255	-.221	-.141	-.123	-.096	-.080	-.073
40.00	-.243	-.163	-.086	-.073	-.046	-.034	-.053
45.00	-.223	-.088	-.020	-.016	-.005	-.009	-.042
50.00	-.198	.005	.044	.037	.056	.057	-.037
55.00	-.111	.103	.114	.089	.104	.092	-.037
60.00	.028	.129	.151	.153	.128	.113	-.042
65.00	.126	.107	.164	.150	.142	.112	-.051
70.00	.214	.037	.182	.161	.157	.112	-.068
75.00	-.824	-.707	-.347	-.293	-.224	-.150	-.069
80.00	-.710	-.711	-.353	-.281	-.228	-.143	-.073
85.00	-.505	-.672	-.362	-.283	-.235	-.134	-.076
90.00	-.335	-.605	-.367	-.283	-.235	-.127	-.079
95.00	-.213	-.509	-.355	-.284	-.233	-.125	-.069
LOWER SURFACE							
1.25	.363	.442	.455	.423	.442	.436	.391
2.50	.342	.364	.385	.357	.366	.362	.305
5.00	.306	.293	.296	.307	.275	.257	.307
7.50	.282	.234	.238	.240	.219	.198	.128
10.00	.239	.209	.197	.194	.174	.170	.076
15.00	.207	.137	.146	.125	.118	.101	.002
20.00	.150	.100	.093	.083	.074	.052	-.032
25.00	.135	.060	.052	.047	.037	.016	-.057
30.00	.095	.032	.017	.017	.004	-.016	-.079
35.00	.056	.000	-.006	-.014	-.021	-.051	-.091
40.00	.032	-.022	-.037	-.037	-.046	-.070	-.114
45.00	.015	-.056	-.054	-.062	-.072	-.093	-.106
50.00	-.037	-.083	-.077	-.084	-.089	-.108	-.106
55.00	-.037	-.096	-.086	-.099	-.101	-.120	-.104
60.00	-.063	-.125	-.101	-.116	-.114	-.126	-.092
65.00	-.102	-.165	-.143	-.134	-.126	-.119	-.081
70.00	-.157						-.086
75.00	-.101	-.105	-.030	-.037	-.045	-.084	-.073
80.00	-.002	-.002	-.055	-.084	-.078	-.083	-.063
85.00	-.015	-.029	-.083	-.083	-.088	-.078	-.067
90.00	-.023	-.066	-.109	-.117	-.093	-.087	-.045
95.00	-.046	-.110	-.130	-.131	-.125	-.087	-.039
GAP		-.793	-.522	-.256	-.279	-.161	

M = 0.60　α = 8.0°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.105	-1.171	-1.398	-.441	-1.086	-.714	-.798
1.25	-.654	-1.080	-1.181	-.784	-.930	-.557	-.640
2.50	-.616	-1.014	-1.106	-.753	-.913	-.520	-.603
5.00	-.581	-.926	-1.001	-.712	-.893	-.497	-.575
7.50	-.532	-.853	-.910	-.666	-.872	-.483	-.557
10.00	-.504	-.812	-.818	-.626	-.861	-.459	-.519
15.00	-.459	-.694	-.594	-.541	-.808	-.416	-.479
20.00	-.425	-.571	-.428	-.467	-.729	-.374	-.383
25.00	-.401	-.477	-.339	-.419	-.585	-.335	-.289
30.00	-.380	-.395	-.279	-.366	-.386	-.298	-.216
35.00	-.339	-.327	-.229	-.309	-.224	-.263	-.169
40.00	-.320	-.256	-.181	-.249	-.107	-.230	-.138
45.00	-.292	-.176	-.134	-.180	-.036	-.198	-.121
50.00	-.265	-.095	-.080	-.124	-.022	-.171	-.110
55.00	-.165	-.005	-.029	-.075	-.066	-.158	-.112
60.00	-.059	.052	.004	-.013	-.108	-.145	-.111
65.00	-.029	.014	.024	-.026	-.124	-.132	-.114
70.00	.125	-.015	.073	.027	-.196	-.083	-.122
75.00	-.744	-.697	-.335	-.306	-.254	-.239	-.136
80.00	-.674	-.700	-.343	-.313	-.263	-.244	-.120
85.00	-.536	-.672	-.355	-.314	-.263	-.226	-.116
90.00	-.378	-.605	-.369	-.311	-.254	-.187	-.106
95.00	-.258	-.485	-.355	-.287	-.231	-.164	-.093
LOWER SURFACE							
1.25	.389	.480	.471	.495	.476	.454	.413
2.50	.381	.437	.440	.433	.430	.412	.355
5.00	.377	.369	.362	.381	.356	.322	.264
7.50	.370	.314	.315	.321	.295	.266	.196
10.00	.325	.282	.272	.277	.246	.238	.141
15.00	.298	.214	.214	.205	.184	.164	.054
20.00	.227	.172	.161	.155	.134	.109	.009
25.00	.210	.131	.114	.107	.096	.067	-.014
30.00	.162	.094	.077	.079	.049	.028	-.040
35.00	.117	.059	.048	.046	.024	.005	-.052
40.00	.093	.031	.017	.018	.004	-.031	-.067
45.00	.070	.000	-.009	-.010	-.033	-.055	-.067
50.00	.013	-.031	-.033	-.033	-.056	-.077	-.067
55.00	.014	-.052	-.055	-.064	-.075	-.091	-.066
60.00	-.018	-.081	-.073	-.087	-.096	-.101	-.059
65.00	-.056	-.132	-.118	-.105	-.117	-.097	-.060
70.00	-.119						-.058
75.00	-.064	.133	.052	.002	-.006	-.033	-.046
80.00	-.036	.020	-.035	-.042	-.060	-.051	-.036
85.00	-.015	-.010	-.067	-.053	-.072	-.051	-.037
90.00	-.003	-.048	-.096	-.088	-.082	-.071	-.028
95.00	-.013	-.089	-.123	-.106	-.111	-.068	-.030
GAP		-.782	-.528	-.256	-.312	-.218	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.60 α = 11.3° UPPER SURFACE							
.00	.009	-1.708	-1.506	-.988	-.645	-.454	-.396
1.25	-1.041	-1.344	-1.072	-.904	-.576	-.402	-.294
2.50	-1.110	-1.356	-1.060	-.893	-.572	-.389	-.291
5.00	-1.058	-1.368	-1.064	-.885	-.572	-.375	-.279
7.50	-.946	-1.404	-1.030	-.869	-.567	-.375	-.274
10.00	-.838	-1.467	-1.019	-.857	-.562	-.371	-.268
15.00	-.709	-1.403	-.973	-.834	-.550	-.362	-.261
20.00	-.632	-1.217	-.930	-.811	-.539	-.352	-.247
25.00	-.584	-.925	-.886	-.791	-.531	-.341	-.236
30.00	-.556	-.624	-.838	-.764	-.524	-.335	-.233
35.00	-.504	-.436	-.776	-.733	-.512	-.322	-.229
40.00	-.461	-.314	-.707	-.692	-.502	-.311	-.223
45.00	-.411	-.216	-.629	-.648	-.493	-.301	-.215
50.00	-.358	-.120	-.555	-.601	-.470	-.285	-.209
55.00	-.245	-.012	-.476	-.559	-.446	-.272	-.203
60.00	-.119	.058	-.406	-.466	-.412	-.263	-.189
65.00	-.015	.021	-.353	-.451	-.381	-.247	-.185
70.00	-.336	-.010	-.271	-.412	-.471	-.232	-.182
75.00	-1.088	-.681	-.401	-.469	-.348	-.226	-.175
80.00	-.726	-.683	-.483	-.517	-.387	-.236	-.171
85.00	-.577	-.666	-.476	-.497	-.401	-.245	-.169
90.00	-.425	-.609	-.439	-.446	-.381	-.239	-.169
95.00	-.295	-.490	-.372	-.399	-.351	-.234	-.165
LOWER SURFACE							
1.25	.390	.497	.468	.504	.490	.482	.413
2.50	.377	.524	.506	.497	.485	.465	.378
5.00	.560	.490	.462	.467	.433	.392	.309
7.50	.498	.442	.417	.417	.380	.338	.240
10.00	.463	.407	.381	.370	.337	.312	.188
15.00	.432	.333	.319	.297	.273	.237	.106
20.00	.361	.288	.260	.244	.220	.175	.039
25.00	.324	.236	.214	.197	.171	.125	.015
30.00	.283	.194	.177	.157	.134	.086	-.016
35.00	.228	.159	.139	.119	.099	.045	-.037
40.00	.192	.125	.103	.085	.062	.010	-.055
45.00	.156	.084	.076	.055	.032	-.024	-.067
50.00	.103	.053	.041	.022	.001	-.049	-.076
55.00	.097	.023	.015	-.008	-.033	-.072	-.083
60.00	.053	-.007	-.009	-.039	-.056	-.090	-.085
65.00	.020	-.059	-.061	-.073	-.090	-.093	-.081
70.00	-.063						-.084
75.00	-.029	.185	.138	.093	.039	-.049	-.092
80.00	.103	.064	.038	-.001	-.040	-.064	-.091
85.00	.066	-.004	-.003	-.025	-.079	-.084	-.091
90.00	.030	-.008	-.033	-.068	-.085	-.125	-.103
95.00	.011	-.061	-.052	-.113	-.163	-.146	-.119
GAP		-.779	-.624	-.412	-.423	-.211	
M = 0.60 α = 15.6° UPPER SURFACE							
.00	-.146	-1.951	-1.140	-.879	-.483	-.423	-.548
1.25	-1.541	-1.894	-1.101	-.698	-.478	-.420	-.483
2.50	-1.787	-1.887	-1.097	-.688	-.479	-.411	-.473
5.00	-1.838	-1.906	-1.116	-.682	-.482	-.406	-.467
7.50	-1.532	-1.951	-1.096	-.672	-.486	-.413	-.476
10.00	-1.244	-1.997	-1.097	-.671	-.487	-.412	-.469
15.00	-1.098	-1.949	-1.071	-.657	-.490	-.413	-.471
20.00	-.917	-1.853	-1.069	-.647	-.491	-.413	-.475
25.00	-.760	-1.675	-1.075	-.645	-.488	-.407	-.473
30.00	-.684	-1.408	-1.082	-.644	-.482	-.407	-.467
35.00	-.618	-1.077	-1.074	-.636	-.471	-.403	-.459
40.00	-.569	-.774	-1.045	-.623	-.464	-.397	-.454
45.00	-.523	-.539	-1.001	-.602	-.458	-.385	-.447
50.00	-.461	-.371	-.950	-.581	-.452	-.372	-.442
55.00	-.344	-.233	-.898	-.562	-.446	-.377	-.435
60.00	-.243	-.186	-.832	-.507	-.437	-.381	-.430
65.00	-.183	-.255	-.853	-.530	-.420	-.376	-.422
70.00	-.010	-.133	-.855	-.476	-.518	-.376	-.426
75.00	-1.062	-.680	-.554	-.508	-.391	-.325	-.414
80.00	-.679	-.718	-.673	-.526	-.411	-.327	-.403
85.00	-.571	-.659	-.622	-.521	-.405	-.327	-.389
90.00	-.446	-.570	-.562	-.499	-.390	-.317	-.379
95.00	-.348	-.425	-.510	-.481	-.375	-.307	-.356
LOWER SURFACE							
1.25	.274	.436	.415	.486	.459	.446	.310
2.50	.311	.553	.532	.536	.506	.483	.312
5.00	.542	.580	.533	.532	.480	.436	.263
7.50	.610	.547	.506	.494	.442	.398	.200
10.00	.595	.521	.475	.461	.403	.374	.148
15.00	.570	.453	.420	.388	.344	.299	.055
20.00	.501	.404	.361	.334	.289	.234	-.032
25.00	.456	.353	.311	.285	.237	.181	-.059
30.00	.407	.304	.267	.249	.194	.137	-.107
35.00	.351	.260	.228	.201	.154	.092	-.135
40.00	.306	.231	.192	.166	.119	.047	-.172
45.00	.277	.185	.154	.124	.073	.007	-.175
50.00	.212	.144	.119	.086	.037	-.027	-.193
55.00	.211	.116	.088	.047	.001	-.061	-.209
60.00	.158	.074	.050	.007	-.042	-.090	-.207
65.00	.115	.008	-.020	-.052	-.086	-.102	-.216
70.00	.016						-.235
75.00	-.045	.247	.202	.105	.047	-.033	-.229
80.00	.175	.120	.077	-.006	-.048	-.077	-.237
85.00	.127	.085	-.027	-.053	-.095	-.105	-.243
90.00	.076	.038	-.027	-.123	-.110	-.153	-.250
95.00	.051	-.005	-.089	-.195	-.196	-.183	-.266
GAP		-.761	-.766	-.480	-.498	-.336	

TABLE III WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

$M = 0.60 \quad \alpha = 19.5°$

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.194	-1.145	-1.014	-.853	-.668	-.533	-.463
1.25	-.831	-1.122	-.943	-.762	-.659	-.527	-.436
2.50	-1.122	-1.117	-.925	-.756	-.654	-.527	-.431
5.00	-1.256	-1.116	-.935	-.754	-.651	-.518	-.423
7.50	-1.220	-1.114	-.924	-.753	-.647	-.518	-.421
10.00	-1.195	-1.101	-.921	-.747	-.646	-.519	-.417
15.00	-1.167	-1.092	-.913	-.740	-.639	-.515	-.416
20.00	-1.134	-1.087	-.897	-.734	-.628	-.507	-.417
25.00	-1.092	-1.076	-.878	-.723	-.620	-.495	-.418
30.00	-1.062	-1.064	-.865	-.715	-.609	-.490	-.418
35.00	-1.018	-1.052	-.852	-.703	-.596	-.480	-.412
40.00	-.967	-1.033	-.823	-.694	-.586	-.471	-.406
45.00	-.922	-1.010	-.809	-.679	-.585	-.475	-.403
50.00	-.877	-.984	-.794	-.685	-.597	-.494	-.396
55.00	-.809	-.957	-.787	-.691	-.626	-.528	-.389
60.00	-.743	-.943	-.780	-.645	-.626	-.549	-.379
65.00	-.648	-.936	-.755	-.662	-.591	-.549	-.370
70.00	-.465	-.949	-.716	-.646	-.657	-.533	-.364
75.00	-1.077	-.743	-.644	-.550	-.449	-.365	-.351
80.00	-.710	-.781	-.657	-.557	-.457	-.387	-.339
85.00	-.573	-.753	-.656	-.548	-.449	-.380	-.330
90.00	-.530	-.722	-.648	-.531	-.438	-.364	-.319
95.00	-.493	-.680	-.634	-.515	-.419	-.346	-.305

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.182	.427	.355	.432	.383	.387	.369
2.50	.283	.576	.509	.517	.494	.488	.414
5.00	.563	.614	.547	.545	.508	.476	.397
7.50	.700	.593	.533	.514	.486	.446	.344
10.00	.673	.569	.508	.487	.455	.428	.297
15.00	.646	.507	.464	.422	.402	.357	.208
20.00	.576	.467	.399	.375	.344	.298	.128
25.00	.536	.415	.355	.326	.295	.243	.078
30.00	.481	.370	.311	.284	.250	.193	.035
35.00	.426	.327	.267	.237	.203	.143	-.004
40.00	.382	.287	.222	.192	.161	.097	-.015
45.00	.348	.241	.184	.147	.115	.053	-.053
50.00	.279	.193	.138	.097	.072	.012	-.075
55.00	.268	.151	.096	.053	.039	-.024	-.087
60.00	.213	.100	.046	.006	.014	-.061	-.095
65.00	.165	.022	-.038	-.058	-.077	-.080	-.106
70.00	.060						-.118
75.00	.066	.247	.165	.099	.079	-.006	-.128
80.00	.186	.103	.020	.015	.028	-.065	-.141
85.00	.128	-.004	-.052	-.070	-.092	-.099	-.147
90.00	.068	-.059	-.135	-.142	-.109	-.163	-.163
95.00	.024	-.163	-.216	-.223	-.207	-.193	-.193
GAP		-.872	-.863	-.561	-.614	-.374	

$M = 0.60 \quad \alpha = 25.9°$

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.340	-.878	-.900	-.829	-.706	-.607	-.505
1.25	-.790	-.876	-.882	-.798	-.702	-.591	-.492
2.50	-.914	-.873	-.869	-.799	-.699	-.591	-.494
5.00	-.871	-.878	-.881	-.800	-.698	-.582	-.483
7.50	-.865	-.880	-.873	-.799	-.693	-.585	-.486
10.00	-.864	-.882	-.879	-.798	-.691	-.583	-.480
15.00	-.868	-.880	-.874	-.789	-.686	-.577	-.477
20.00	-.867	-.889	-.872	-.780	-.677	-.568	-.477
25.00	-.867	-.894	-.865	-.771	-.672	-.551	-.480
30.00	-.871	-.893	-.861	-.765	-.665	-.551	-.483
35.00	-.873	-.896	-.856	-.781	-.673	-.543	-.484
40.00	-.873	-.899	-.859	-.799	-.691	-.562	-.481
45.00	-.873	-.892	-.868	-.811	-.709	-.584	-.482
50.00	-.871	-.882	-.885	-.805	-.713	-.615	-.475
55.00	-.865	-.868	-.888	-.739	-.685	-.653	-.463
60.00	-.856	-.855	-.867	-.755	-.653	-.678	-.452
65.00	-.838	-.843	-.836	-.747	-.719	-.655	-.446
70.00	-.797	-.835	-.806	-.635	-.546	-.448	-.430
75.00	-.914	-.831	-.725	-.640	-.555	-.463	-.419
80.00	-.834	-.833	-.728	-.632	-.548	-.457	-.403
85.00	-.812	-.823	-.722	-.625	-.542	-.445	-.394
90.00	-.798	-.809	-.716	-.628	-.528	-.432	-.375
95.00	-.783	-.790	-.710				

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	-.040	.341	.227	.319	.240	.247	.260
2.50	.160	.570	.475	.477	.450	.453	.383
5.00	.582	.655	.574	.566	.524	.491	.415
7.50	.723	.666	.585	.554	.530	.493	.388
10.00	.722	.657	.575	.543	.514	.486	.354
15.00	.741	.614	.546	.505	.476	.428	.272
20.00	.687	.579	.504	.461	.430	.377	.209
25.00	.641	.530	.457	.412	.384	.329	.140
30.00	.598	.481	.416	.373	.336	.275	.087
35.00	.544	.439	.369	.321	.292	.222	.044
40.00	.497	.395	.321	.278	.245	.175	.013
45.00	.461	.346	.277	.228	.194	.123	-.023
50.00	.396	.291	.225	.180	.148	.077	-.046
55.00	.376	.251	.178	.126	.093	.027	-.069
60.00	.319	.194	.119	.066	.046	.012	-.082
65.00	.265	.101	.023	.007	.030	.050	-.101
70.00	.151						-.118
75.00	.151	.300	.214	.156	.125	.034	-.130
80.00	.233	.133	.057	.009	.004	.070	-.146
85.00	.173	.042	-.021	-.055	-.073	-.100	-.166
90.00	.082	-.057	-.119	-.143	-.115	-.169	-.190
95.00	.002	-.195	-.229	-.243	-.238	-.222	-.224
GAP		-.892	-.897	-.634	-.725	-.430	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 0.0°							
UPPER SURFACE							
.00	.251	.518	.477	.764	.478	.465	.332
1.25	.118	-.057	-.036	.019	.168	.275	.180
2.50	.086	-.045	-.024	-.011	.085	.125	.119
5.00	.064	-.046	-.019	-.004	.065	.100	.059
7.50	.033	-.057	-.026	-.017	.039	.069	.025
10.00	.012	-.070	-.045	-.015	.032	.057	-.019
15.00	-.020	-.078	-.038	-.001	.021	.025	-.055
20.00	-.047	-.083	-.026	-.007	.020	.031	-.069
25.00	-.069	-.076	-.014	-.015	.031	.033	-.057
30.00	-.079	-.062	-.001	-.029	.045	.035	-.047
35.00	-.071	-.039	-.022	-.051	.065	.047	-.042
40.00	-.077	-.010	-.060	-.078	.091	.068	-.036
45.00	-.074	.080	-.104	-.120	.132	.102	-.051
50.00	-.056	.174	-.178	-.184	.189	.151	-.059
55.00	.014	.283	-.266	-.264	.271	.221	-.070
60.00	.125	.300	-.303	-.356	.321	.252	-.058
65.00	.206	.280	-.273	-.337	.312	.237	-.062
70.00	.337	.231	-.304	-.355	.326	.233	-.067
75.00	-.681	-.687	-.358	-.296	.251	-.183	-.070
80.00	-.563	-.701	-.369	-.298	.251	-.174	-.083
85.00	-.415	-.668	-.376	-.298	.251	-.164	-.100
90.00	-.344	-.611	-.387	-.305	.251	-.156	-.115
95.00	-.220	-.525	-.385	-.307	.253	-.152	-.112
LOWER SURFACE							
1.25	.183	-.102	-.169	-.368	-.407	-.509	-.608
2.50	.121	-.076	-.126	-.197	-.302	-.356	-.464
5.00	.068	-.068	-.123	-.123	-.248	-.290	-.324
7.50	.031	-.087	-.133	-.158	-.245	-.269	-.333
10.00	-.002	-.096	-.144	-.179	-.241	-.235	-.330
15.00	-.034	-.117	-.169	-.225	-.234	-.253	-.292
20.00	-.077	-.136	-.191	-.229	-.250	-.277	-.273
25.00	-.063	-.155	-.214	-.240	-.260	-.279	-.231
30.00	-.117	-.173	-.236	-.247	-.271	-.283	-.228
35.00	-.135	-.196	-.254	-.257	-.278	-.293	-.226
40.00	-.148	-.214	-.273	-.272	-.291	-.285	-.229
45.00	-.167	-.243	-.281	-.281	-.300	-.274	-.217
50.00	-.227	-.270	-.281	-.285	-.300	-.270	-.207
55.00	-.209	-.285	-.273	-.285	-.299	-.259	-.193
60.00	-.233	-.327	-.266	-.274	-.282	-.244	-.166
65.00	-.268	-.336	-.265	-.279	-.264	-.213	-.149
70.00	-.304						-.147
75.00	-.340	-.001	-.095	-.210	-.208	-.203	-.125
80.00	-.163	-.094	-.163	-.206	-.208	-.147	-.114
85.00	-.157	-.100	-.178	-.196	-.195	-.138	-.105
90.00	-.142	-.111	-.202	-.208	-.189	-.138	-.087
95.00	-.129	-.147	-.211	-.211	-.194	-.132	-.088
GAP		-.756	-.466	-.298	-.279	-.203	
M = 0.85 α = 4.0°							
UPPER SURFACE							
.00	.247	.101	-.001	.277	-.106	-.081	.066
1.25	-.251	-.847	-1.009	-.930	-.841	-.884	-.794
2.50	-.214	-.717	-.825	-.717	-.724	-.668	-.627
5.00	-.188	-.403	-.437	-.409	-.358	-.325	-.319
7.50	-.177	-.364	-.374	-.333	-.326	-.290	-.295
10.00	-.200	-.338	-.341	-.277	-.291	-.252	-.262
15.00	-.215	-.301	-.273	-.232	-.208	-.212	-.168
20.00	-.232	-.282	-.215	-.179	-.172	-.156	-.139
25.00	-.242	-.255	-.172	-.146	-.131	-.119	-.101
30.00	-.239	-.220	-.132	-.100	-.095	-.081	-.075
35.00	-.223	-.169	-.087	-.057	-.048	-.040	-.061
40.00	-.221	-.095	-.032	-.009	-.006	-.009	-.046
45.00	-.204	.001	.025	.051	.064	.063	-.045
50.00	-.173	.113	.094	.109	.120	.114	-.042
55.00	-.068	.195	.156	.154	.158	.145	-.044
60.00	.040	.177	.178	.212	.173	.151	-.039
65.00	.118	.108	.180	.202	.171	.141	-.046
70.00	.270	.055	.196	.216	.182	.133	-.052
75.00	-.775	-.698	-.380	-.299	-.241	-.176	-.053
80.00	-.648	-.683	-.380	-.299	-.243	-.168	-.056
85.00	-.489	-.647	-.380	-.301	-.241	-.158	-.063
90.00	-.427	-.595	-.384	-.302	-.241	-.151	-.069
95.00	-.314	-.519	-.378	-.306	-.241	-.145	-.065
LOWER SURFACE							
1.25	.336	.332	.345	.330	.323	.320	.255
2.50	.307	.259	.269	.255	.244	.243	.167
5.00	.274	.195	.183	.204	.155	.137	.090
7.50	.217	.140	.133	.142	.100	.086	.015
10.00	.178	.125	.101	.105	.064	.071	-.037
15.00	.143	.066	.051	.027	.021	.005	-.125
20.00	.087	.031	.008	-.006	-.023	-.044	-.138
25.00	.085	-.001	-.026	-.038	-.055	-.081	-.146
30.00	.033	-.029	-.066	-.065	-.086	-.111	-.160
35.00	-.001	-.059	-.086	-.093	-.113	-.149	-.166
40.00	-.017	-.082	-.116	-.119	-.137	-.171	-.172
45.00	-.041	-.113	-.131	-.143	-.163	-.189	-.166
50.00	-.107	-.146	-.156	-.163	-.177	-.204	-.163
55.00	-.093	-.163	-.162	-.177	-.191	-.209	-.154
60.00	-.117	-.199	-.172	-.188	-.196	-.202	-.136
65.00	-.158	-.238	-.198	-.207	-.199	-.191	-.130
70.00	-.198						-.115
75.00	-.223	-.068	-.009	-.099	-.130	-.160	-.095
80.00	-.064	-.042	-.105	-.138	-.154	-.132	-.087
85.00	-.081	-.076	-.131	-.143	-.158	-.124	-.080
90.00	-.076	-.096	-.164	-.164	-.163	-.126	-.056
95.00	-.101	-.143	-.181	-.181	-.174	-.126	-.046
GAP		-.753	-.519	-.296	-.280	-.196	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 6.0°								
UPPER SURFACE	.00	.242	-.217	-.299	-.128	-.474	-.378	-.304
	1.25	-.518	-1.041	-1.203	-.731	-.807	-.628	-.776
	2.50	-.460	-1.026	-.975	-.680	-.762	-.500	-.646
	5.00	-.392	-.900	-.791	-.626	-.720	-.453	-.552
	7.50	-.356	-.794	-.671	-.573	-.689	-.434	-.514
	10.00	-.330	-.674	-.599	-.516	-.656	-.405	-.453
	15.00	-.333	-.487	-.469	-.443	-.573	-.361	-.340
	20.00	-.340	-.414	-.352	-.361	-.478	-.315	-.253
	25.00	-.348	-.367	-.276	-.289	-.367	-.264	-.180
	30.00	-.333	-.310	-.211	-.227	-.251	-.232	-.133
	35.00	-.313	-.243	-.154	-.173	-.153	-.195	-.104
	40.00	-.307	-.158	-.096	-.120	-.071	-.165	-.083
	45.00	-.281	-.060	-.042	-.067	-.004	-.132	-.070
	50.00	-.240	-.049	-.010	-.016	-.057	-.106	-.068
	55.00	-.114	-.143	-.062	-.030	-.113	-.088	-.075
	60.00	-.012	-.142	-.097	-.097	-.147	-.075	-.073
	65.00	-.092	-.099	-.098	-.078	-.156	-.069	-.088
	70.00	-.223	-.032	-.128	-.108	-.191	-.030	-.092
	75.00	-.782	-.715	-.374	-.307	-.253	-.201	-.097
	80.00	-.649	-.693	-.381	-.313	-.259	-.210	-.092
	85.00	-.516	-.655	-.381	-.317	-.260	-.197	-.090
	90.00	-.448	-.608	-.383	-.317	-.260	-.178	-.085
	95.00	-.351	-.536	-.376	-.302	-.248	-.154	-.075
LOWER SURFACE	1.25	.390	.443	.448	.447	.434	.424	.377
	2.50	.384	.369	.374	.357	.362	.345	.291
	5.00	.352	.293	.286	.305	.269	.244	.204
	7.50	.314	.240	.233	.249	.209	.187	.121
	10.00	.270	.214	.197	.205	.168	.169	.062
	15.00	.235	.148	.145	.128	.108	.097	-.042
	20.00	.172	.104	.092	.086	.060	.038	-.078
	25.00	.160	.068	.051	.045	.021	-.005	-.113
	30.00	.113	.037	.017	.019	.014	-.043	-.131
	35.00	.071	.005	-.013	-.013	-.043	-.081	-.136
	40.00	.050	-.021	-.041	-.045	-.073	-.111	-.142
	45.00	.027	-.057	-.065	-.071	-.104	-.141	-.137
	50.00	-.038	-.092	-.093	-.097	-.123	-.165	-.135
	55.00	-.031	-.114	-.107	-.119	-.145	-.171	-.126
	60.00	-.056	-.148	-.126	-.136	-.152	-.171	-.109
	65.00	-.099	-.187	-.156	-.162	-.167	-.160	-.098
	70.00	-.150						-.095
	75.00	-.167	-.098	-.027	-.044	-.077	-.101	-.075
	80.00	-.018	-.021	-.072	-.096	-.119	-.095	-.070
	85.00	-.040	-.055	-.103	-.098	-.132	-.095	-.066
	90.00	-.049	-.094	-.136	-.132	-.135	-.100	-.044
	95.00	-.092	-.144	-.157	-.145	-.152	-.095	-.042
	GAP		-.761	-.540	-.275	-.300	-.202	
M = 0.85 α = 8.0°								
UPPER SURFACE	.00	.226	-.518	-.522	-.039	-.812	-.634	-.544
	1.25	-.667	-1.207	-.902	-.838	-.900	-.574	-.656
	2.50	-.624	-1.177	-.856	-.782	-.888	-.523	-.618
	5.00	-.566	-1.147	-.837	-.741	-.880	-.498	-.597
	7.50	-.529	-1.105	-.775	-.697	-.875	-.489	-.597
	10.00	-.500	-1.055	-.723	-.653	-.870	-.476	-.590
	15.00	-.486	-.893	-.632	-.601	-.845	-.457	-.552
	20.00	-.465	-.710	-.555	-.588	-.803	-.440	-.487
	25.00	-.468	-.539	-.486	-.587	-.747	-.421	-.373
	30.00	-.457	-.391	-.428	-.532	-.660	-.418	-.268
	35.00	-.429	-.277	-.364	-.451	-.535	-.410	-.209
	40.00	-.426	-.187	-.307	-.355	-.341	-.415	-.186
	45.00	-.401	-.098	-.255	-.262	-.171	-.419	-.188
	50.00	-.332	-.009	-.214	-.193	-.062	-.421	-.189
	55.00	-.171	-.118	-.177	-.137	-.014	-.421	-.201
	60.00	-.069	-.123	-.150	-.063	-.067	-.400	-.192
	65.00	-.029	-.084	-.145	-.073	-.092	-.341	-.192
	70.00	-.168	-.016	-.095	-.002	-.157	-.298	-.189
	75.00	-.740	-.704	-.397	-.336	-.270	-.355	-.174
	80.00	-.668	-.686	-.419	-.343	-.276	-.366	-.160
	85.00	-.559	-.659	-.409	-.342	-.267	-.282	-.149
	90.00	-.485	-.623	-.399	-.327	-.250	-.218	-.143
	95.00	-.433	-.559	-.381	-.298	-.223	-.171	-.137
LOWER SURFACE	1.25	.410	.506	.493	.497	.475	.473	.421
	2.50	.438	.445	.431	.412	.421	.414	.353
	5.00	.420	.376	.347	.368	.342	.323	.269
	7.50	.399	.318	.298	.312	.282	.266	.188
	10.00	.350	.292	.261	.268	.240	.243	.133
	15.00	.315	.214	.203	.189	.178	.168	.029
	20.00	.245	.170	.149	.142	.125	.107	-.005
	25.00	.225	.131	.105	.098	.082	.059	-.069
	30.00	.175	.094	.067	.068	.047	.016	-.099
	35.00	.130	.060	.039	.032	.016	-.026	-.111
	40.00	.099	.030	.004	.000	-.019	-.057	-.123
	45.00	.076	-.009	-.018	-.030	-.049	-.091	-.120
	50.00	.013	-.045	-.053	-.060	-.073	-.121	-.117
	55.00	.014	-.070	-.070	-.082	-.100	-.137	-.110
	60.00	-.016	-.108	-.090	-.104	-.113	-.147	-.094
	65.00	-.059	-.153	-.130	-.135	-.135	-.147	-.087
	70.00	-.114						-.086
	75.00	-.132	-.121	-.053	-.004	-.020	-.018	-.071
	80.00	-.003	-.006	-.047	-.063	-.078	-.059	-.067
	85.00	-.011	-.060	-.082	-.073	-.094	-.062	-.070
	90.00	-.029	-.101	-.118	-.109	-.099	-.069	-.060
	95.00	-.081	-.160	-.133	-.129	-.120	-.065	-.068
	GAP		-.756	-.579	-.293	-.313	-.296	

TABLE III — WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.85   α = 11.3°

UPPER SURFACE

PERCENT CHORD	P at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.177	-.912	-.983	-.433	-.622	-.466	-.500
1.25	-.451	-1.476	-1.135	-.812	-.538	-.396	-.394
2.50	-.622	-1.458	-1.084	-.802	-.538	-.379	-.395
5.00	-.743	-1.489	-1.092	-.796	-.532	-.368	-.395
7.50	-.774	-1.480	-1.061	-.796	-.526	-.377	-.406
10.00	-.756	-1.452	-1.033	-.794	-.522	-.378	-.401
15.00	-.731	-1.377	-.953	-.785	-.514	-.378	-.399
20.00	-.675	-1.341	-.883	-.777	-.505	-.376	-.391
25.00	-.645	-1.260	-.889	-.780	-.501	-.370	-.374
30.00	-.621	-.905	-.907	-.780	-.494	-.368	-.361
35.00	-.601	-.438	-.895	-.779	-.489	-.363	-.347
40.00	-.592	-.258	-.866	-.769	-.479	-.357	-.335
45.00	-.598	-.114	-.814	-.741	-.468	-.345	-.326
50.00	-.573	-.040	-.748	-.702	-.451	-.337	-.311
55.00	-.345	.042	-.655	-.658	-.431	-.324	-.298
60.00	-.169	.038	-.570	-.551	-.414	-.316	-.286
65.00	-.012	.047	-.487	-.572	-.399	-.306	-.283
70.00	.230	.076	-.401	-.533	-.399	-.291	-.284
75.00	-.998	-.704	-.475	-.556	-.356	-.272	-.271
80.00	-.676	-.685	-.534	-.613	-.384	-.283	-.266
85.00	-.568	-.654	-.514	-.587	-.396	-.287	-.262
90.00	-.502	-.612	-.482	-.528	-.381	-.281	-.259
95.00	-.427	-.545	-.429	-.469	-.366	-.274	-.250

LOWER SURFACE

PERCENT CHORD	P at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.422	.567	.516	.532	.508	.489	.445
2.50	.469	.544	.506	.504	.487	.468	.402
5.00	.530	.489	.447	.462	.427	.389	.326
7.50	.538	.437	.404	.410	.375	.340	.257
10.00	.499	.406	.365	.362	.334	.318	.195
15.00	.452	.334	.308	.293	.275	.234	.090
20.00	.374	.284	.250	.242	.216	.173	-.012
25.00	.340	.240	.206	.192	.170	.121	-.050
30.00	.288	.200	.166	.156	.131	.076	-.095
35.00	.239	.161	.131	.117	.094	.026	-.126
40.00	.201	.128	.095	.081	.056	-.013	-.149
45.00	.172	.088	.063	.044	.018	-.057	-.158
50.00	.115	.047	.028	.010	-.012	-.098	-.167
55.00	.111	.018	.001	-.024	-.047	-.128	-.174
60.00	.067	-.023	-.029	-.056	-.072	-.150	-.168
65.00	.031	-.074	-.078	-.099	-.130	-.154	-.172
70.00	-.045						-.174
75.00	-.077	.179	.118	.112	.017	-.107	-.172
80.00	.076	.047	.012	.001	-.072	-.128	-.177
85.00	.049	-.003	-.031	-.035	-.116	-.152	-.176
90.00	.014	-.061	-.068	-.083	-.168	-.188	-.179
95.00	.004	-.135	-.082	-.141	-.203	-.197	-.189
GAP		-.733	-.695	-.502	-.429	-.257	

M = 0.85   α = 15.6°

UPPER SURFACE

PERCENT CHORD	P at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.089	-1.282	-1.042	-.829	-.543	-.482	-.532
1.25	-.622	-1.468	-.993	-.662	-.535	-.471	-.469
2.50	-.856	-1.441	-.978	-.652	-.540	-.471	-.465
5.00	-1.035	-1.420	-1.011	-.644	-.540	-.461	-.463
7.50	-1.057	-1.395	-1.000	-.633	-.542	-.473	-.468
10.00	-1.036	-1.371	-.998	-.625	-.542	-.473	-.460
15.00	-.998	-1.298	-.972	-.614	-.545	-.473	-.457
20.00	-.907	-1.269	-.939	-.616	-.545	-.473	-.456
25.00	-.798	-1.229	-.913	-.619	-.542	-.464	-.453
30.00	-.661	-1.184	-.894	-.614	-.537	-.459	-.456
35.00	-.593	-1.126	-.870	-.605	-.534	-.450	-.456
40.00	-.631	-1.060	-.847	-.593	-.529	-.444	-.450
45.00	-.681	-.974	-.809	-.582	-.521	-.435	-.447
50.00	-.694	-.853	-.773	-.578	-.511	-.439	-.442
55.00	-.559	-.743	-.747	-.573	-.502	-.450	-.436
60.00	-.422	-.709	-.707	-.511	-.493	-.455	-.423
65.00	-.307	-.615	-.692	-.560	-.490	-.448	-.421
70.00	-.078	-.529	-.653	-.526	-.515	-.388	-.416
75.00	-1.101	-.883	-.610	-.538	-.445	-.398	-.399
80.00	-.757	-.959	-.653	-.543	-.454	-.398	-.385
85.00	-.635	-.723	-.641	-.537	-.450	-.387	-.368
90.00	-.555	-.470	-.628	-.526	-.446	-.373	-.352
95.00	-.408	-.338	-.619	-.511	-.438		-.332

LOWER SURFACE

PERCENT CHORD	P at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.354	.584	.503	.571	.479	.463	.429
2.50	.477	.619	.555	.557	.507	.492	.427
5.00	.626	.598	.535	.535	.477	.445	.380
7.50	.693	.558	.501	.490	.437	.401	.310
10.00	.652	.528	.470	.450	.399	.377	.263
15.00	.601	.461	.417	.384	.347	.300	.152
20.00	.519	.414	.362	.332	.288	.240	.045
25.00	.476	.363	.311	.282	.238	.185	-.008
30.00	.425	.321	.271	.238	.193	.132	-.068
35.00	.368	.277	.229	.196	.150	.080	-.116
40.00	.331	.242	.190	.155	.111	.032	-.151
45.00	.296	.199	.154	.108	.061	-.018	-.171
50.00	.233	.151	.112	.066	.021	-.068	-.186
55.00	.225	.119	.078	.028	-.022	-.110	-.200
60.00	.178	.072	.041	.019	-.064	-.143	-.207
65.00	.136	.012	.025	.079	-.119	-.161	-.217
70.00	.039						-.221
75.00	.007	.257	.184	.095	.029	.083	-.230
80.00	.165	.120	.046	.031	.084	.124	-.242
85.00	.118	.065	-.017	-.080	-.141	-.193	-.239
90.00	.070	.011	-.093	-.150	-.206	-.243	-.240
95.00	.043	-.044	-.162	-.218	-.248	-.262	-.258
GAP		-.789	-.751	-.513	-.566	-.390	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.85 α = 19.6°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.028	-1.085	-.953	-.821	-.650	-.578	-.568
1.25	-.683	-1.067	-.867	-.711	-.646	-.573	-.536
2.50	-.842	-1.058	-.834	-.705	-.643	-.570	-.533
5.00	-1.092	-1.026	-.846	-.705	-.640	-.561	-.531
7.50	-1.090	-1.020	-.837	-.699	-.640	-.571	-.535
10.00	-1.075	-1.012	-.836	-.698	-.640	-.571	-.522
15.00	-1.065	-.988	-.827	-.688	-.637	-.571	-.515
20.00	-1.019	-.978	-.819	-.683	-.632	-.564	-.515
25.00	-.961	-.966	-.806	-.680	-.625	-.552	-.508
30.00	-.907	-.953	-.794	-.678	-.623	-.552	-.509
35.00	-.849	-.943	-.783	-.670	-.613	-.544	-.511
40.00	-.808	-.926	-.766	-.663	-.607	-.529	-.508
45.00	-.771	-.907	-.757	-.657	-.598	-.525	-.507
50.00	-.761	-.891	-.749	-.649	-.598	-.539	-.506
55.00	-.699	-.870	-.741	-.639	-.600	-.561	-.498
60.00	-.654	-.865	-.737	-.567	-.604	-.586	-.488
65.00	-.551	-.866	-.724	-.619	-.599	-.607	-.495
70.00	-.941	-.883	-.699	-.595	-.619	-.589	-.486
75.00	-.979	-.744	-.674	-.586	-.531	-.431	-.460
80.00	-.757	-.745	-.684	-.591	-.537	-.449	-.451
85.00	-.647	-.721	-.678	-.589	-.535	-.452	-.441
90.00	-.613	-.707	-.670	-.584	-.530	-.446	-.428
95.00	-.527	-.695	-.661	-.590	-.516	-.428	-.410
LOWER SURFACE							
1.25	.245	.569	.470	.553	.426	.409	.387
2.50	.439	.656	.575	.567	.507	.497	.435
5.00	.691	.662	.585	.573	.513	.482	.416
7.50	.784	.635	.562	.533	.485	.448	.369
10.00	.745	.611	.539	.504	.452	.436	.318
15.00	.700	.549	.489	.446	.405	.363	.213
20.00	.621	.501	.435	.394	.348	.306	.117
25.00	.572	.450	.390	.347	.302	.253	.048
30.00	.523	.407	.347	.302	.255	.196	-.025
35.00	.467	.362	.302	.256	.211	.141	-.083
40.00	.420	.323	.260	.212	.166	.092	-.116
45.00	.386	.277	.219	.166	.118	.039	-.147
50.00	.319	.239	.173	.119	.071	-.019	-.170
55.00	.309	.190	.131	.071	.028	-.064	-.194
60.00	.259	.141	.089	.017	-.019	-.110	-.210
65.00	.213	.068	.003	-.051	-.095	-.140	-.235
70.00	.106						-.250
75.00	.066	.282	.194	.130	.070	.057	-.254
80.00	.214	.140	.047	-.018	-.058	-.115	-.283
85.00	.152	.047	-.023	-.071	-.126	-.177	-.294
90.00	.090	-.017	-.106	-.150	-.188	-.271	-.295
95.00	.048	-.118	-.182	-.225	-.261	-.292	-.319
GAP		-.732	-.749	-.591	-.670	-.414	

M = 0.85 α = 26.0°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.210	-.802	-.825	-.773	-.731	-.869	-.624
1.25	-.551	-.801	-.809	-.754	-.731	-.658	-.609
2.50	-.845	-.797	-.789	-.751	-.729	-.649	-.607
5.00	-.834	-.803	-.809	-.751	-.729	-.637	-.601
7.50	-.819	-.806	-.798	-.751	-.726	-.633	-.602
10.00	-.809	-.806	-.802	-.757	-.726	-.633	-.595
15.00	-.796	-.803	-.800	-.747	-.726	-.634	-.591
20.00	-.793	-.812	-.797	-.743	-.723	-.631	-.589
25.00	-.792	-.818	-.793	-.744	-.719	-.614	-.591
30.00	-.797	-.823	-.791	-.742	-.718	-.619	-.591
35.00	-.796	-.826	-.789	-.741	-.718	-.613	-.594
40.00	-.801	-.831	-.781	-.741	-.720	-.615	-.598
45.00	-.804	-.834	-.779	-.742	-.733	-.632	-.600
50.00	-.807	-.831	-.777	-.751	-.749	-.653	-.600
55.00	-.805	-.824	-.779	-.750	-.755	-.681	-.596
60.00	-.798	-.812	-.774	-.680	-.737	-.716	-.584
65.00	-.778	-.798	-.766	-.734	-.705	-.747	-.584
70.00	-.719	-.781	-.755	-.731	-.724	-.734	-.580
75.00	-.836	-.772	-.731	-.685	-.621	-.535	-.562
80.00	-.774	-.779	-.733	-.686	-.629	-.550	-.548
85.00	-.758	-.774	-.789	-.684	-.629	-.549	-.537
90.00	-.747	-.770	-.727	-.679	-.623	-.542	-.526
95.00	-.726	-.760	-.722	-.682	-.610	-.531	-.511
LOWER SURFACE							
1.25	.054	.512	.379	.465	.312	.277	.279
2.50	.328	.677	.568	.556	.479	.466	.404
5.00	.735	.737	.637	.619	.541	.505	.442
7.50	.833	.736	.639	.590	.543	.502	.415
10.00	.815	.722	.629	.582	.527	.499	.382
15.00	.809	.675	.593	.543	.492	.447	.295
20.00	.750	.636	.552	.504	.448	.394	.198
25.00	.704	.590	.511	.459	.404	.345	.130
30.00	.660	.546	.470	.418	.362	.293	.059
35.00	.606	.503	.429	.371	.318	.240	-.001
40.00	.562	.459	.384	.327	.275	.187	-.051
45.00	.525	.415	.340	.282	.224	.132	-.091
50.00	.463	.366	.294	.234	.178	.074	-.124
55.00	.445	.322	.247	.185	.133	.018	-.160
60.00	.393	.268	.193	.125	.072	-.033	-.184
65.00	.346	.192	.111	.051	.006	-.078	-.216
70.00	.230						-.245
75.00	.200	.375	.271	.220	.152	.019	-.265
80.00	.306	.225	.126	.064	.011	-.116	-.299
85.00	.237	.138	.044	-.003	-.070	-.184	-.322
90.00	.165	.048	-.042	-.090	-.146	-.260	-.340
95.00	.097	-.075	-.131	-.182	-.236	-.311	-.380
GAP		-.660	-.721	-.598	-.717	-.459	

TABLE III

WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.90 α = 0.0°

Surface	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT: 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.267	-.525	-.481	.783	.484	.469	.345
	1.25	.204	-.065	-.061	.011	-.148	-.257	.164
	2.50	.159	-.052	-.042	.003	-.065	-.107	.101
	5.00	.121	-.051	-.037	-.007	-.047	-.084	.042
	7.50	.074	-.064	-.039	-.007	-.024	-.053	.021
	10.00	.022	-.076	-.050	-.004	-.006	-.042	-.037
	15.00	-.013	-.085	-.043	-.010	-.009	-.008	-.082
	20.00	-.043	-.094	-.032	-.001	-.009	-.018	-.094
	25.00	-.066	-.091	-.017	-.003	-.021	-.019	-.075
	30.00	-.079	-.078	-.002	-.020	-.033	-.023	-.059
	35.00	-.074	-.051	-.024	-.042	-.056	-.036	-.046
	40.00	-.083	-.002	-.060	-.071	-.083	-.056	-.045
	45.00	-.079	-.092	-.108	-.118	-.126	-.091	-.063
	50.00	-.061	-.181	-.179	-.180	-.187	-.144	-.077
	55.00	-.019	-.294	-.266	-.265	-.272	-.212	-.088
	60.00	.124	-.350	-.297	-.354	-.320	-.243	-.076
	65.00	.214	-.347	-.263	-.340	-.313	-.229	-.075
	70.00	.379	-.285	-.286	-.356	-.342	-.222	-.077
	75.00	-.588	-.710	-.388	-.312	-.272	-.198	-.087
	80.00	-.536	-.730	-.397	-.314	-.273	-.191	-.100
	85.00	-.430	-.695	-.403	-.316	-.272	-.185	-.120
	90.00	-.378	-.643	-.414	-.316	-.272	-.174	-.127
	95.00	-.272	-.561	-.408	-.316	-.272	-.171	-.134
LOWER SURFACE	1.25	.206	-.068	-.118	-.212	-.362	-.436	-.533
	2.50	.150	-.047	-.097	-.169	-.272	-.328	-.416
	5.00	.100	-.047	-.103	-.107	-.247	-.281	-.313
	7.50	.052	-.066	-.119	-.144	-.251	-.268	-.336
	10.00	.024	-.077	-.132	-.165	-.253	-.227	-.337
	15.00	-.008	-.101	-.159	-.235	-.240	-.362	-.373
	20.00	-.056	-.122	-.187	-.243	-.254	-.289	-.319
	25.00	-.046	-.144	-.212	-.265	-.272	-.309	-.265
	30.00	-.097	-.162	-.234	-.277	-.279	-.317	-.245
	35.00	-.116	-.187	-.259	-.293	-.295	-.333	-.231
	40.00	-.131	-.204	-.289	-.280	-.316	-.341	-.233
	45.00	-.151	-.238	-.329	-.270	-.328	-.347	-.230
	50.00	-.198	-.263	-.375	-.282	-.333	-.316	-.221
	55.00	-.197	-.266	-.364	-.297	-.335	-.264	-.205
	60.00	-.223	-.323	-.289	-.288	-.320	-.250	-.182
	65.00	-.249	-.402	-.257	-.290	-.284	-.217	-.152
	70.00	-.282						-.145
	75.00	-.419	-.062	-.080	-.238	-.258	-.201	-.129
	80.00	-.228	-.107	-.168	-.235	-.238	-.166	-.111
	85.00	-.222	-.105	-.193	-.220	-.231	-.153	-.108
	90.00	-.183	-.113	-.229	-.227	-.210	-.147	-.092
	95.00	-.155	-.156	-.239	-.229	-.207	-.142	-.097
	GAP		-.770	-.523	-.319	-.295	-.216	

M = 0.90 α = 4.0°

Surface	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.265	.166	.054	.349	.052	.042	.091
	1.25	-.073	-.842	-1.004	-.907	-.856	-.904	-.824
	2.50	-.092	-.766	-.893	-.784	-.773	-.819	-.737
	5.00	-.115	-.401	-.514	-.459	-.424	-.330	-.353
	7.50	-.141	-.356	-.423	-.356	-.348	-.305	-.333
	10.00	-.179	-.342	-.380	-.304	-.316	-.281	-.312
	15.00	-.203	-.318	-.279	-.260	-.236	-.235	-.200
	20.00	-.223	-.305	-.211	-.207	-.191	-.178	-.144
	25.00	-.244	-.304	-.168	-.165	-.147	-.135	-.107
	30.00	-.244	-.274	-.131	-.122	-.106	-.098	-.084
	35.00	-.237	-.181	-.090	-.078	-.055	-.052	-.067
	40.00	-.244	-.086	-.039	-.027	-.002	-.000	-.053
	45.00	-.242	-.021	-.026	-.036	-.053	-.056	-.054
	50.00	-.198	-.134	-.094	-.098	-.114	-.106	-.057
	55.00	-.064	-.199	-.147	-.141	-.152	-.139	-.064
	60.00	.060	-.176	-.164	-.200	-.168	-.146	-.061
	65.00	.141	-.053	-.160	-.190	-.171	-.141	-.067
	70.00	.264	-.032	-.179	-.203	-.181	-.132	-.067
	75.00	-.703	-.723	-.399	-.322	-.258	-.188	-.072
	80.00	-.613	-.709	-.405	-.321	-.258	-.181	-.074
	85.00	-.497	-.672	-.403	-.321	-.258	-.172	-.080
	90.00	-.457	-.623	-.401	-.326	-.258	-.166	-.084
	95.00	-.364	-.551	-.395	-.323	-.258	-.162	-.079
LOWER SURFACE	1.25	.347	.338	.351	.334	.326	.328	.267
	2.50	.322	.264	.268	.251	.249	.249	.178
	5.00	.296	.197	.185	.203	.158	.142	.101
	7.50	.233	.151	.138	.144	.101	.091	.022
	10.00	.191	.132	.106	.107	.063	.078	-.034
	15.00	.156	.071	.056	.022	.025	.007	-.148
	20.00	.100	.037	.007	.012	-.026	-.047	-.167
	25.00	.094	.002	-.030	-.046	-.063	-.090	-.182
	30.00	.048	-.026	-.064	-.070	-.093	-.123	-.191
	35.00	.011	-.059	-.092	-.101	-.121	-.167	-.191
	40.00	-.008	-.081	-.123	-.127	-.152	-.195	-.188
	45.00	-.031	-.114	-.143	-.152	-.177	-.227	-.188
	50.00	-.095	-.149	-.165	-.175	-.197	-.247	-.183
	55.00	-.083	-.171	-.170	-.187	-.216	-.244	-.173
	60.00	-.111	-.235	-.182	-.199	-.217	-.233	-.153
	65.00	-.149	-.255	-.197	-.231	-.218	-.205	-.134
	70.00	-.186						-.125
	75.00	-.287	-.066	-.013	-.105	-.158	-.187	-.110
	80.00	-.085	-.050	-.106	-.165	-.189	-.155	-.096
	85.00	-.091	-.080	-.138	-.161	-.192	-.145	-.080
	90.00	-.084	-.106	-.179	-.186	-.190	-.143	-.067
	95.00	-.113	-.155	-.196	-.198	-.194	-.136	-.059
	GAP		-.769	-.548	-.319	-.296	-.207	

TABLE III WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.90   α = 6.0°

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.264	-.093	-.195	.191	-.426	-.318	-.266
	1.25	-.345	-.972	-1.252	-1.187	-.829	-.636	-.873
	2.50	-.318	-.962	-1.192	-1.175	-.813	-.500	-.724
	5.00	-.292	-.812	-1.101	-1.086	-.760	-.446	-.598
	7.50	-.277	-.717	-.980	-.978	-.721	-.431	-.561
	10.00	-.297	-.632	-.724	-.739	-.692	-.412	-.526
	15.00	-.310	-.492	-.495	-.411	-.599	-.374	-.434
	20.00	-.313	-.434	-.357	-.271	-.504	-.337	-.301
	25.00	-.334	-.412	-.206	-.209	-.402	-.299	-.203
	30.00	-.335	-.407	-.154	-.169	-.293	-.273	-.151
	35.00	-.329	-.388	-.114	-.125	-.196	-.243	-.126
	40.00	-.335	-.171	-.073	-.075	-.116	-.218	-.109
	45.00	-.348	-.026	-.026	-.017	-.046	-.192	-.102
	50.00	-.357	.088	.023	.044	.016	-.167	-.099
	55.00	-.155	.155	.062	.105	.064	-.155	-.106
	60.00	-.023	.133	.083	.175	.095	-.147	-.104
	65.00	.094	.011	.081	.181	.104	-.127	-.113
	70.00	-.224	-.008	-.103	-.200	-.132	-.086	-.109
	75.00	-.674	-.739	-.417	-.321	-.254	-.231	-.114
	80.00	-.606	-.717	-.430	-.321	-.260	-.241	-.107
	85.00	-.535	-.675	-.414	-.321	-.260	-.220	-.101
	90.00	-.483	-.626	-.406	-.322	-.259	-.192	-.094
	95.00	-.410	-.555	-.399	-.314	-.250	-.163	-.083
LOWER SURFACE	1.25	.401	.447	.440	.431	.432	.425	.371
	2.50	.397	.371	.362	.337	.359	.346	.284
	5.00	.368	.299	.276	.296	.270	.244	.196
	7.50	.325	.248	.236	.239	.211	.186	.116
	10.00	.279	.221	.191	.200	.168	.168	.052
	15.00	.244	.154	.132	.120	.114	.094	-.064
	20.00	.182	.110	.084	.078	.059	.035	-.124
	25.00	.169	.072	.040	.037	.030	.013	-.170
	30.00	.118	.042	.003	.005	.017	.052	-.176
	35.00	.076	.006	-.024	-.026	-.050	-.097	-.175
	40.00	.054	-.018	-.059	-.062	-.082	-.136	-.171
	45.00	.027	-.055	-.079	-.093	-.114	-.176	-.171
	50.00	-.034	-.092	-.105	-.119	-.137	-.207	-.165
	55.00	-.027	-.115	-.119	-.136	-.163	-.218	-.151
	60.00	-.057	-.171	-.136	-.155	-.169	-.211	-.131
	65.00	-.097	-.200	-.164	-.190	-.182	-.194	-.117
	70.00	-.139						-.104
	75.00	-.223	.102	.022	-.055	-.114	-.133	-.084
	80.00	-.034	.021	-.086	-.126	-.153	-.119	-.074
	85.00	-.049	-.061	-.119	-.132	-.172	-.114	-.067
	90.00	-.055	-.095	-.161	-.163	-.170	-.113	-.050
	95.00	-.101	-.148	-.181	-.173	-.177	-.109	-.045
	GAP		-.768	-.586	-.309	-.293	-.225	

M = 0.90   α = 7.9°

	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.265	-.348	-.398	.056	-.684	-.577	-.507
	1.25	-.540	-1.116	-1.308	-1.301	-.802	-.577	-.700
	2.50	-.504	-1.101	-1.218	-1.290	-.799	-.528	-.661
	5.00	-.477	-1.069	-1.117	-1.223	-.790	-.506	-.631
	7.50	-.445	-.997	-.977	-1.142	-.785	-.501	-.632
	10.00	-.424	-.934	-.877	-.999	-.780	-.490	-.636
	15.00	-.430	-.779	-.723	-.774	-.769	-.469	-.615
	20.00	-.415	-.613	-.580	-.656	-.753	-.450	-.547
	25.00	-.421	-.496	-.474	-.557	-.723	-.431	-.425
	30.00	-.415	-.455	-.368	-.404	-.670	-.421	-.298
	35.00	-.403	-.457	-.293	-.279	-.622	-.408	-.235
	40.00	-.409	-.408	-.226	-.201	-.554	-.396	-.209
	45.00	-.422	-.081	-.181	-.135	-.476	-.380	-.209
	50.00	-.461	.048	-.150	-.082	-.382	-.370	-.208
	55.00	-.290	.121	-.130	-.036	-.300	-.361	-.214
	60.00	-.120	.105	-.124	.033	-.228	-.348	-.200
	65.00	-.033	.002	-.132	.035	-.175	-.307	-.194
	70.00	-.172	-.011	-.083	-.081	-.137	-.271	-.190
	75.00	-.657	-.721	-.441	-.330	-.285	-.323	-.175
	80.00	-.607	-.701	-.448	-.330	-.312	-.337	-.167
	85.00	-.551	-.666	-.427	-.330	-.293	-.300	-.160
	90.00	-.471	-.621	-.415	-.324	-.267	-.258	-.158
	95.00	-.444	-.558	-.404	-.307	-.230	-.222	-.149
LOWER SURFACE	1.25	.431	.521	.490	.475	.474	.469	.418
	2.50	.464	.456	.428	.398	.420	.410	.351
	5.00	.443	.388	.350	.357	.335	.314	.267
	7.50	.419	.332	.298	.301	.279	.238	.188
	10.00	.371	.305	.262	.260	.238	.238	.127
	15.00	.334	.231	.203	.180	.177	.159	.017
	20.00	.265	.186	.148	.135	.121	.098	-.040
	25.00	.246	.145	.104	.093	.080	.044	-.107
	30.00	.194	.110	.068	.060	.041	.004	-.140
	35.00	.145	.073	.035	.025	.004	-.044	-.152
	40.00	.122	.044	.090	.011	-.030	-.081	-.156
	45.00	.091	.007	-.027	-.043	-.064	-.125	-.152
	50.00	.029	-.033	-.053	-.074	-.109	-.160	-.142
	55.00	.033	-.060	-.076	-.097	-.117	-.182	-.127
	60.00	.000	-.106	-.099	-.121	-.170	-.191	-.114
	65.00	-.041	-.147	-.138	-.154	-.156	-.174	-.105
	70.00	-.089						-.103
	75.00	-.160	.136	.053	.015	.056	.036	-.090
	80.00	-.009	.011	-.055	-.089	-.111	-.075	-.085
	85.00	-.001	-.043	-.091	-.098	-.127	-.077	-.082
	90.00	-.016	-.087	-.132	-.139	-.129	-.092	-.076
	95.00	-.060	-.148	-.150	-.157	-.135	-.094	-.081
	GAP		-.745	-.617	-.304	-.325	-.303	

CONFIDENTIAL

TABLE III — WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.90 α = 11.3°

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.223	-.715	-.771	-.333	-.767	-.495	-.445
	1.25	-.335	-1.326	-1.147	-1.073	-.678	-.441	-.364
	2.50	-.498	-1.308	-1.060	-1.052	-.672	-.439	-.365
	5.00	-.617	-1.346	-1.051	-1.034	-.670	-.420	-.363
	7.50	-.658	-1.323	-1.014	-1.040	-.665	-.425	-.360
	10.00	-.646	-1.285	-.989	-1.039	-.659	-.422	-.355
	15.00	-.634	-1.198	-.902	-1.019	-.653	-.418	-.351
	20.00	-.598	-1.148	-.815	-.989	-.641	-.411	-.344
	25.00	-.573	-1.063	-.768	-.973	-.630	-.395	-.340
	30.00	-.559	-.891	-.717	-.941	-.624	-.395	-.336
	35.00	-.543	-.560	-.678	-.913	-.619	-.389	-.329
	40.00	-.540	-.465	-.658	-.869	-.609	-.378	-.323
	45.00	-.547	-.217	-.648	-.791	-.592	-.365	-.316
	50.00	-.576	-.029	-.622	-.681	-.569	-.355	-.310
	55.00	-.427	-.050	-.591	-.577	-.541	-.343	-.300
	60.00	-.256	-.040	-.544	-.431	-.510	-.334	-.291
	65.00	-.067	-.056	-.488	-.414	-.492	-.324	-.289
	70.00	-.184	-.093	-.399	-.375	-.438	-.315	-.284
	75.00	-1.009	-.748	-.517	-.444	-.447	-.295	-.268
	80.00	-.691	-.733	-.548	-.473	-.490	-.303	-.261
	85.00	-.568	-.706	-.508	-.453	-.486	-.311	-.258
	90.00	-.531	-.665	-.467	-.424	-.446	-.302	-.254
	95.00	-.466	-.603	-.427	-.383	-.404	-.297	-.251
LOWER SURFACE	1.25	.432	.589	.535	.541	.503	.500	.462
	2.50	.505	.557	.515	.496	.487	.480	.418
	5.00	.586	.501	.451	.455	.425	.407	.348
	7.50	.561	.447	.404	.403	.376	.354	.278
	10.00	.521	.418	.368	.359	.333	.332	.218
	15.00	.472	.346	.312	.288	.275	.251	.107
	20.00	.390	.297	.253	.241	.216	.188	.000
	25.00	.355	.253	.207	.188	.172	.135	-.043
	30.00	.306	.210	.168	.152	.131	.089	-.095
	35.00	.255	.172	.133	.114	.093	.041	-.133
	40.00	.216	.140	.096	.077	.057	-.008	-.149
	45.00	.187	.100	.065	.041	.016	-.054	-.167
	50.00	.130	.056	.028	.006	-.017	-.096	-.174
	55.00	.126	.024	.001	-.025	-.048	-.129	-.179
	60.00	.083	-.022	-.032	-.058	-.078	-.159	-.179
	65.00	.044	-.071	-.083	-.105	-.129	-.157	-.189
	70.00	-.023						-.186
	75.00	-.093	.192	.111	.074	.046	-.100	-.181
	80.00	-.080	.057	-.009	-.025	-.051	-.127	-.190
	85.00	.057	.012	-.052	-.049	-.100	-.168	-.190
	90.00	.024	-.063	-.093	-.093	-.135	-.217	-.186
	95.00	.006	-.146	-.107	-.132	-.180	-.220	-.197
	GAP		-.746	-.695	-.393	-.513	-.274	

M = 0.90 α = 15.6°

	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	-.128	-1.094	-1.035	-.851	-.533	-.489	-.535
	1.25	-.503	-1.502	-.956	-.741	-.527	-.489	-.475
	2.50	-.722	-1.473	-.925	-.738	-.532	-.489	-.473
	5.00	-.895	-1.490	-.951	-.730	-.542	-.481	-.475
	7.50	-.931	-1.501	-.950	-.724	-.548	-.492	-.481
	10.00	-.918	-1.487	-.951	-.712	-.550	-.492	-.473
	15.00	-.898	-1.409	-.950	-.695	-.560	-.493	-.467
	20.00	-.829	-1.357	-.937	-.684	-.564	-.493	-.466
	25.00	-.773	-1.269	-.920	-.687	-.566	-.484	-.467
	30.00	-.734	-1.197	-.911	-.670	-.566	-.489	-.466
	35.00	-.697	-1.123	-.899	-.653	-.555	-.486	-.471
	40.00	-.671	-1.006	-.879	-.639	-.549	-.480	-.466
	45.00	-.621	-.850	-.861	-.624	-.543	-.478	-.461
	50.00	-.546	-.689	-.828	-.611	-.537	-.470	-.456
	55.00	-.462	-.544	-.793	-.601	-.529	-.470	-.449
	60.00	-.367	-.528	-.756	-.531	-.517	-.472	-.437
	65.00	-.267	-.659	-.755	-.592	-.509	-.479	-.443
	70.00	-.055	-.467	-.688	-.553	-.494	-.477	-.438
	75.00	-1.160	-.929	-.620	-.566	-.492	-.426	-.417
	80.00	-.821	-.940	-.669	-.573	-.495	-.442	-.402
	85.00	-.691	-.884	-.657	-.569	-.496	-.446	-.390
	90.00	-.699	-.746	-.641	-.559	-.495	-.438	-.373
	95.00	-.559	-.536	-.631	-.550	-.487	-.421	-.351
LOWER SURFACE	1.25	.359	.610	.530	.573	.489	.465	.439
	2.50	.508	.632	.570	.556	.512	.494	.439
	5.00	.666	.605	.541	.535	.479	.446	.392
	7.50	.709	.562	.507	.487	.440	.404	.329
	10.00	.665	.533	.472	.446	.401	.384	.274
	15.00	.612	.464	.418	.379	.349	.306	.166
	20.00	.526	.415	.362	.330	.290	.244	.064
	25.00	.485	.364	.313	.284	.243	.190	-.005
	30.00	.430	.323	.273	.244	.197	.138	-.073
	35.00	.376	.283	.234	.199	.154	.083	-.131
	40.00	.333	.244	.194	.159	.112	.034	-.165
	45.00	.300	.200	.158	.115	.066	-.022	-.191
	50.00	.238	.156	.119	.074	.027	-.076	-.204
	55.00	.230	.119	.085	.034	-.016	-.130	-.214
	60.00	.181	.070	.046	-.010	-.053	-.170	-.231
	65.00	.140	.009	-.016	-.074	-.119	-.186	-.260
	70.00	.045						-.268
	75.00	-.015	.258	.194	.114	.039	-.111	-.267
	80.00	.168	.117	-.055	-.030	-.078	-.145	-.291
	85.00	.117	.049	-.008	-.075	-.148	-.215	-.285
	90.00	.065	-.006	-.076	-.144	-.211	-.303	-.280
	95.00	.036	-.067	-.137	-.213	-.259	-.325	-.289
	GAP		-.793	-.741	-.540	-.602	-.422	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

		PRESSURE COEFFICIENT, P, AT:					
PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.90   α = 19.8°

UPPER SURFACE

Percent chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.019	-1.129	-.942	-.806	-.647	-.588	-.634
1.25	-.602	-1.111	-.884	-.709	-.640	-.582	-.607
2.50	-.834	-1.106	-.854	-.705	-.640	-.579	-.601
5.00	-1.130	-1.094	-.872	-.698	-.639	-.571	-.601
7.50	-1.126	-1.080	-.861	-.696	-.639	-.579	-.600
10.00	-1.079	-1.066	-.857	-.692	-.636	-.579	-.591
15.00	-1.059	-1.035	-.849	-.681	-.636	-.580	-.586
20.00	-.985	-1.028	-.835	-.672	-.633	-.580	-.584
25.00	-.917	-1.008	-.821	-.672	-.628	-.570	-.583
30.00	-.845	-.993	-.808	-.668	-.627	-.576	-.585
35.00	-.782	-.977	-.796	-.666	-.630	-.569	-.586
40.00	-.752	-.953	-.781	-.663	-.613	-.562	-.584
45.00	-.730	-.927	-.767	-.658	-.610	-.556	-.582
50.00	-.733	-.903	-.751	-.653	-.602	-.559	-.579
55.00	-.663	-.877	-.739	-.648	-.593	-.570	-.573
60.00	-.597	-.877	-.723	-.574	-.592	-.589	-.561
65.00	-.502	-.818	-.725	-.640	-.596	-.613	-.567
70.00	-.317	-.837	-.691	-.612	-.657	-.604	-.560
75.00	-.982	-.784	-.685	-.615	-.563	-.472	-.536
80.00	-.810	-.785	-.692	-.617	-.569	-.488	-.523
85.00	-.656	-.729	-.691	-.615	-.571	-.496	-.513
90.00	-.626	-.696	-.683	-.607	-.567	-.486	-.498
95.00	-.511	-.680	-.674	-.605	-.555	-.469	-.482

LOWER SURFACE

Percent chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.263	.604	.498	.572	.442	.416	.423
2.50	.479	.682	.596	.585	.521	.502	.477
5.00	.739	.690	.605	.585	.526	.490	.463
7.50	.815	.662	.583	.549	.500	.459	.411
10.00	.770	.633	.560	.518	.467	.446	.363
15.00	.727	.575	.512	.463	.423	.376	.255
20.00	.647	.530	.457	.412	.366	.319	.134
25.00	.601	.478	.411	.366	.322	.265	.061
30.00	.550	.438	.371	.329	.275	.212	.020
35.00	.495	.394	.329	.281	.228	.160	-.085
40.00	.450	.354	.289	.237	.190	.106	-.131
45.00	.416	.308	.249	.190	.143	.053	-.170
50.00	.352	.261	.207	.143	.097	.007	-.194
55.00	.341	.222	.164	.099	.049	-.058	-.220
60.00	.291	.173	.117	.049	.004	-.112	-.248
65.00	.247	.105	.044	.019	-.067	-.139	-.287
70.00	.140		.232	.166	-.095	-.042	-.310
75.00	.092	.325	.085	.012	-.032	-.124	-.326
80.00	.246	.184	.014	-.040	-.108	-.213	-.359
85.00	.182	.107	-.063	-.117	-.175	-.295	-.377
90.00	.127	.036	-.134	-.190	-.242	-.338	-.385
95.00	.086	-.060					-.401
GAP		-.701	-.718	-.584	-.675	-.443	

M = 0.90   α = 26.2°

UPPER SURFACE

Percent chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.173	-.805	-.825	-.780	-.743	-.961	-.628
1.25	-.465	-.798	-.808	-.752	-.738	-.681	-.609
2.50	-.841	-.793	-.786	-.752	-.731	-.669	-.603
5.00	-.836	-.799	-.805	-.751	-.733	-.636	-.583
7.50	-.825	-.801	-.796	-.750	-.733	-.643	-.589
10.00	-.815	-.807	-.801	-.743	-.733	-.644	-.594
15.00	-.801	-.801	-.797	-.750	-.732	-.645	-.588
20.00	-.790	-.812	-.796	-.747	-.736	-.636	-.587
25.00	-.790	-.817	-.795	-.753	-.742	-.643	-.593
30.00	-.789	-.817	-.792	-.746	-.744	-.648	-.591
35.00	-.793	-.828	-.786	-.747	-.746	-.656	-.597
40.00	-.791	-.832	-.779	-.746	-.746	-.672	-.598
45.00	-.797	-.833	-.777	-.746	-.746	-.693	-.603
50.00	-.803	-.832	-.772	-.746	-.749	-.724	-.601
55.00	-.799	-.826	-.768	-.747	-.736	-.730	-.602
60.00	-.794	-.823	-.764	-.671	-.699	-.752	-.590
65.00	-.763	-.800	-.741	-.733	-.719	-.582	-.578
70.00	-.672	-.798	-.743	-.736	-.657	-.593	-.576
75.00	-.826	-.775	-.735	-.704	-.669	-.594	-.571
80.00	-.786	-.779	-.743	-.705	-.669	-.586	-.560
85.00	-.772	-.772	-.740	-.705	-.664	-.574	-.544
90.00	-.762	-.769	-.737	-.702	-.651		-.533
95.00	-.741	-.762	-.729	-.698			-.514

LOWER SURFACE

Percent chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.088	.548	.419	.483	.338	.291	.302
2.50	.370	.705	.604	.578	.502	.482	.428
5.00	.802	.765	.662	.638	.563	.526	.466
7.50	.866	.761	.671	.613	.563	.523	.445
10.00	.846	.751	.656	.608	.550	.522	.416
15.00	.840	.705	.626	.570	.516	.470	.340
20.00	.780	.665	.583	.527	.473	.424	.242
25.00	.737	.620	.543	.486	.431	.371	.177
30.00	.691	.578	.502	.447	.390	.324	.104
35.00	.637	.532	.462	.402	.347	.274	.050
40.00	.594	.495	.419	.358	.305	.221	-.009
45.00	.558	.448	.375	.314	.256	.170	-.046
50.00	.501	.400	.332	.266	.211	.109	-.081
55.00	.480	.359	.290	.219	.161	.054	-.118
60.00	.430	.307	.233	.163	.109	.003	-.145
65.00	.385	.234	.157	.093	.037	-.040	-.175
70.00	.267		.315	.256	.188	.068	-.214
75.00	.233	.415	.166	.100	.053	-.105	-.246
80.00	.341	.270	.094	.044	-.027	-.145	-.264
85.00	.275	.176	.007	-.042	-.109	-.223	-.309
90.00	.206	.097	-.075	-.129	-.186	-.296	-.340
95.00	.141	-.019	-.075				-.371
GAP		-.608	-.662	-.571	-.682	-.450	

TABLE III — WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.94 α = -0.3°

	PERCENT CHORD	\(P\) at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.282	.539	.489	.790	.482	.462	.321
	1.25	.122	-.012	-.023	.048	.155	.284	.201
	2.50	.114	-.010	-.012	.037	.073	.122	.130
	5.00	.102	-.021	-.017	.014	.053	.098	.070
	7.50	.083	-.042	-.016	.028	.027	.061	.035
	10.00	.048	-.054	-.031	.025	-.004	.050	-.021
	15.00	.014	-.072	-.023	.004	-.009	.022	-.084
	20.00	-.018	-.082	-.008	.010	-.009	.030	-.144
	25.00	-.045	-.085	.008	.013	-.022	.030	-.093
	30.00	-.059	-.072	.024	.024	-.035	.030	-.075
	35.00	-.059	-.044	.045	.042	-.057	.039	-.066
	40.00	-.074	-.008	.077	.069	-.088	.056	-.058
	45.00	-.072	.118	.120	.114	.131	.088	-.072
	50.00	-.050	.205	.190	.181	.193	.143	-.092
	55.00	.036	.315	.272	.269	.274	.209	-.098
	60.00	.148	.367	.304	.359	.312	.231	-.080
	65.00	.231	.360	.267	.347	.309	.206	-.081
	70.00	.358	.296	.286	.362	.324	.203	-.093
	75.00	-.409	-.761	-.443	-.318	-.276	-.197	-.099
	80.00	-.458	-.790	-.433	-.318	-.277	-.191	-.111
	85.00	-.569	-.732	-.426	-.318	-.277	-.184	-.128
	90.00	-.431	-.677	-.425	-.318	-.277	-.181	-.130
	95.00	-.355	-.601	-.418	-.318	-.277	-.181	-.133
LOWER SURFACE	1.25	.217	-.092	-.127	-.221	-.371	-.484	-.633
	2.50	.158	-.062	-.095	-.172	-.277	-.383	-.510
	5.00	.110	-.043	-.096	-.100	-.250	-.320	-.343
	7.50	.059	-.067	-.108	-.134	-.257	-.307	-.370
	10.00	.029	-.060	-.120	-.157	-.263	-.265	-.382
	15.00	-.005	-.100	-.145	-.210	-.267	-.319	-.405
	20.00	-.052	-.120	-.170	-.236	-.289	-.355	-.414
	25.00	-.044	-.141	-.192	-.255	-.328	-.377	-.416
	30.00	-.092	-.160	-.220	-.263	-.346	-.396	-.400
	35.00	-.113	-.183	-.242	-.300	-.372	-.425	-.360
	40.00	-.123	-.200	-.269	-.328	-.406	-.440	-.284
	45.00	-.143	-.230	-.294	-.371	-.447	-.450	-.216
	50.00	-.195	-.257	-.331	-.419	-.478	-.416	-.186
	55.00	-.193	-.254	-.367	-.448	-.459	-.387	-.180
	60.00	-.211	-.296	-.411	-.448	-.351	-.313	-.163
	65.00	-.235	-.365	-.449	-.349	-.306	-.211	-.144
	70.00	-.258						-.144
	75.00	-.435	-.152	-.198	-.270	-.296	-.160	-.130
	80.00	-.234	-.231	-.216	-.270	-.258	-.120	-.117
	85.00	-.257	-.228	-.232	-.262	-.247	-.124	-.109
	90.00	-.261	-.224	-.258	-.249	-.240	-.137	-.094
	95.00	-.261	-.207	-.286	-.231	-.240	-.137	-.105
	GAP		-.826	-.512	-.328	-.297	-.215	

M = 0.94 α = 3.9°

	PERCENT CHORD	\(P\) at 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.282	-.243	-.130	-.397	-.024	-.019	-.117
	1.25	-.140	-.798	-.979	-.865	-.872	-.917	-.907
	2.50	-.130	-.721	-.881	-.770	-.809	-.849	-.835
	5.00	-.133	-.340	-.528	-.545	-.477	-.451	-.429
	7.50	-.138	-.320	-.387	-.348	-.352	-.325	-.384
	10.00	-.156	-.313	-.394	-.277	-.318	-.308	-.323
	15.00	-.174	-.296	-.378	-.248	-.249	-.248	-.293
	20.00	-.187	-.292	-.218	-.211	-.217	-.203	-.188
	25.00	-.217	-.293	-.098	-.165	-.177	-.161	-.107
	30.00	-.223	-.299	-.084	-.117	-.127	-.118	-.089
	35.00	-.219	-.302	-.063	-.076	-.078	-.069	-.077
	40.00	-.241	-.072	-.028	-.026	-.020	-.022	-.065
	45.00	-.256	.065	.029	.034	.041	.040	-.068
	50.00	-.266	.176	.090	.093	.096	.093	-.077
	55.00	-.080	.217	.140	.138	.132	.126	-.089
	60.00	-.056	.177	.154	.190	.148	.136	-.085
	65.00	-.170	-.045	.148	.173	.143	.130	-.090
	70.00	-.291	.025	.168	.184	.170	.120	-.089
	75.00	-.451	-.793	-.453	-.335	-.278	-.197	-.091
	80.00	-.502	-.803	-.456	-.335	-.278	-.190	-.087
	85.00	-.585	-.746	-.449	-.331	-.276	-.187	-.093
	90.00	-.500	-.676	-.441	-.330	-.276	-.182	-.096
	95.00	-.431	-.585	-.427	-.328	-.272	-.178	-.090
LOWER SURFACE	1.25	.358	.335	.341	.332	.315	.325	.266
	2.50	.333	.264	.260	.246	.240	.242	.184
	5.00	.289	.204	.184	.202	.150	.139	.110
	7.50	.243	.156	.135	.149	.096	.086	.032
	10.00	.205	.142	.107	.114	.062	.076	.034
	15.00	.169	.077	.052	.022	.020	.002	-.141
	20.00	.111	.042	.008	.016	.035	.054	-.207
	25.00	.102	.007	-.032	-.054	-.072	-.093	-.290
	30.00	.055	-.022	-.068	-.074	-.105	-.131	-.304
	35.00	.020	-.052	-.096	-.099	-.125	-.172	-.278
	40.00	-.000	-.075	-.139	-.135	-.157	-.212	-.265
	45.00	-.022	-.110	-.183	-.151	-.200	-.256	-.248
	50.00	-.084	-.141	-.224	-.188	-.232	-.297	-.214
	55.00	-.077	-.153	-.174	-.222	-.227	-.332	-.188
	60.00	-.100	-.222	-.185	-.193	-.251	-.340	-.176
	65.00	-.136	-.319	-.229	-.234	-.251	-.281	-.148
	70.00	-.164						-.135
	75.00	-.353	-.052	-.003	-.113	-.201	-.283	-.109
	80.00	-.136	-.038	-.100	-.187	-.212	-.193	-.102
	85.00	-.131	-.067	-.142	-.200	-.225	-.168	-.093
	90.00	-.108	-.105	-.184	-.221	-.235	-.148	-.071
	95.00	.132	-.144	-.222	-.223	-.261	-.141	-.065
	GAP		-.815	-.617	-.336	-.311	-.215	

TABLE III

WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.94   α = 5.8°

UPPER SURFACE

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.442	.011	-.083	.273	-.361	-.398	-.228
1.25	-.362	-.942	-1.187	-1.150	-1.204	-1.063	-.937
2.50	-.313	-.961	-1.144	-1.201	-1.201	-1.001	-.854
5.00	-.286	-.715	-1.092	-1.126	-1.144	-.893	-.755
7.50	-.267	-.587	-1.009	-1.070	-1.071	-.800	-.682
10.00	-.271	-.507	-.863	-1.016	-.885	-.669	-.602
15.00	-.275	-.419	-.472	-.652	-.415	-.494	-.486
20.00	-.278	-.396	-.452	-.244	-.296	-.396	-.372
25.00	-.298	-.387	-.411	-.181	-.234	-.308	-.261
30.00	-.301	-.385	-.173	-.121	-.188	-.247	-.197
35.00	-.299	-.393	-.190	-.085	-.136	-.180	-.153
40.00	-.312	-.355	-.047	-.044	-.082	-.120	-.134
45.00	-.328	-.053	.003	-.006	-.026	-.058	-.116
50.00	-.367	.088	.049	.066	.028	-.002	-.113
55.00	-.226	.140	.085	.120	.074	.042	-.121
60.00	-.011	.108	.104	.183	.112	.067	-.120
65.00	.138	.105	.097	.167	.119	.071	-.128
70.00	.251	-.030	.120	.179	.142	.075	-.128
75.00	-.491	-.779	-.478	-.348	-.281	-.210	-.127
80.00	-.534	-.773	-.484	-.346	-.277	-.209	-.121
85.00	-.581	-.729	-.460	-.343	-.277	-.207	-.117
90.00	-.515	-.670	-.444	-.341	-.277	-.203	-.108
95.00	-.457	-.592	-.433	-.338	-.271	-.193	-.095

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.411	.449	.437	.407	.418	.431	.378
2.50	.409	.371	.361	.321	.349	.350	.303
5.00	.377	.303	.278	.285	.259	.247	.217
7.50	.335	.248	.221	.231	.202	.191	.138
10.00	.291	.239	.189	.194	.161	.173	.076
15.00	.255	.158	.135	.108	.107	.092	-.032
20.00	.191	.117	.080	.065	.050	.030	-.108
25.00	.177	.079	.037	.027	.010	-.020	-.227
30.00	.129	.047	-.001	-.001	-.025	-.058	-.278
35.00	.087	.012	-.036	-.029	-.062	-.103	-.302
40.00	.063	-.013	-.072	-.065	-.099	-.141	-.288
45.00	.038	-.049	-.094	-.095	-.127	-.189	-.256
50.00	-.021	-.087	-.115	-.128	-.147	-.249	-.212
55.00	-.020	-.107	-.127	-.148	-.192	-.274	-.170
60.00	-.049	-.185	-.151	-.147	-.219	-.303	-.160
65.00	-.082	-.269	-.177	-.219	-.195	-.290	-.132
70.00	-.122						-.124
75.00	-.281	.102	.022	-.044	-.138	-.330	-.102
80.00	-.064	-.016	-.081	-.152	-.175	-.221	-.096
85.00	-.057	-.048	-.119	-.164	-.204	-.194	-.092
90.00	-.057	-.093	-.175	-.194	-.218	-.139	-.065
95.00	.104	-.146	-.211	-.206	-.245	-.139	-.057
GAP		-.785	-.647	-.337	-.321	-.220	

M = 0.94   α = 7.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.288	-.207	-.261	-.148	-.581	-.644	-.415
1.25	-.530	-1.074	-1.273	-1.248	-1.290	-.786	-.573
2.50	-.492	-1.063	-1.215	-1.288	-1.287	-.769	-.559
5.00	-.449	-1.051	-1.205	-1.232	-1.242	-.737	-.550
7.50	-.408	-.903	-1.132	-1.182	-1.196	-.732	-.543
10.00	-.373	-.818	-1.077	-1.126	-1.135	-.719	-.533
15.00	-.374	-.643	-.842	-1.071	-.830	-.702	-.517
20.00	-.363	-.502	-.607	-.829	-.655	-.683	-.499
25.00	-.373	-.438	-.482	-.447	-.553	-.650	-.483
30.00	-.369	-.423	-.345	-.378	-.474	-.630	-.466
35.00	-.365	-.437	-.237	-.302	-.403	-.595	-.448
40.00	-.370	-.453	-.178	-.160	-.328	-.564	-.429
45.00	-.385	-.181	-.132	-.055	-.251	-.522	-.415
50.00	-.425	.038	-.090	-.009	-.174	-.471	-.396
55.00	-.322	.093	-.061	-.062	-.108	-.421	-.379
60.00	-.061	.059	-.053	-.136	-.057	-.376	-.352
65.00	.113	-.120	-.058	-.138	-.039	-.320	-.316
70.00	.245	-.059	-.018	-.160	-.007	-.255	-.306
75.00	-.540	-.787	-.531	-.379	-.295	-.302	-.295
80.00	-.571	-.774	-.524	-.375	-.305	-.323	-.271
85.00	-.593	-.736	-.486	-.373	-.302	-.289	-.247
90.00	-.519	-.687	-.477	-.370	-.297	-.249	-.222
95.00	-.503	-.619	-.459	-.361	-.285	-.203	-.199

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.443	.523	.492	.464	.454	.463	.420
2.50	.473	.455	.427	.383	.394	.404	.349
5.00	.451	.384	.345	.340	.310	.308	.267
7.50	.427	.331	.292	.283	.256	.249	.190
10.00	.377	.303	.262	.247	.213	.230	.130
15.00	.340	.229	.198	.170	.155	.152	.019
20.00	.271	.183	.144	.126	.099	.088	-.053
25.00	.249	.143	.099	.081	.054	.035	-.146
30.00	.198	.107	.059	.049	.017	-.009	-.198
35.00	.152	.071	.024	.012	-.020	-.053	-.229
40.00	.123	.042	-.009	-.026	-.056	-.097	-.243
45.00	.096	.004	-.036	-.063	-.089	-.150	-.258
50.00	.035	-.036	-.066	-.095	-.115	-.189	-.255
55.00	.035	-.061	-.088	-.120	-.164	-.221	-.226
60.00	.005	-.135	-.112	-.134	-.168	-.264	-.171
65.00	-.032	-.155	-.142	-.206	-.167	-.264	-.135
70.00	-.076						-.119
75.00	-.216	.138	.050	-.015	-.100	-.246	-.104
80.00	-.013	.012	-.065	-.139	-.149	-.193	-.102
85.00	-.004	-.031	-.109	-.146	-.188	-.160	-.100
90.00	-.017	-.077	-.167	-.177	-.200	-.128	-.086
95.00	.061	-.146	-.205	-.194	-.230	-.118	-.090
GAP		-.783	-.685	-.361	-.340	-.289	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
	M = 0.94 $\alpha = 11.4^{\circ}$							
UPPER SURFACE	.00	-.252	-.589	-.628	-.157	-.832	-.593	-.529
	1.25	-.260	-1.224	-1.219	-1.159	-.815	-.539	-.448
	2.50	-.416	-1.205	-1.108	-1.147	-.808	-.522	-.446
	5.00	-.534	-1.242	-1.050	-1.131	-.803	-.508	-.451
	7.50	-.577	-1.210	-.985	-1.133	-.799	-.511	-.455
	10.00	-.574	-1.163	-.955	-1.128	-.797	-.505	-.446
	15.00	-.571	-1.075	-.904	-1.074	-.803	-.495	-.441
	20.00	-.537	-1.024	-.822	-1.030	-.805	-.487	-.439
	25.00	-.519	-.945	-.733	-1.002	-.805	-.469	-.435
	30.00	-.509	-.813	-.658	-.962	-.804	-.466	-.436
	35.00	-.494	-.597	-.585	-.925	-.799	-.460	-.437
	40.00	-.493	-.463	-.543	-.893	-.779	-.451	-.426
	45.00	-.501	-.456	-.569	-.832	-.762	-.439	-.420
	50.00	-.533	-.021	-.593	-.710	-.734	-.414	-.414
	55.00	-.436	.071	-.584	-.554	-.690	-.400	-.404
	60.00	-.276	.075	-.567	-.363	-.638	-.393	-.389
	65.00	-.092	-.080	-.541	-.336	-.603	-.380	-.388
	70.00	-.190	-.063	-.452	-.301	-.600	-.380	-.384
	75.00	-1.083	-.856	-.615	-.476	-.562	-.344	-.362
	80.00	-.694	-.849	-.643	-.487	-.615	-.372	-.355
	85.00	-.581	-.814	-.599	-.466	-.576	-.381	-.353
	90.00	-.573	-.761	-.548	-.435	-.508	-.373	-.348
	95.00	-.482	-.689	-.513	-.401	-.447	-.362	-.342
LOWER SURFACE	1.25	.439	.603	.545	.538	.500	.491	.483
	2.50	.527	.570	.515	.487	.475	.468	.437
	5.00	.636	.510	.452	.444	.415	.393	.359
	7.50	.577	.457	.404	.391	.364	.342	.284
	10.00	.534	.429	.367	.351	.330	.321	.219
	15.00	.486	.356	.308	.276	.262	.236	.098
	20.00	.403	.305	.254	.229	.202	.175	-.003
	25.00	.368	.259	.204	.183	.160	.122	-.080
	30.00	.319	.222	.164	.146	.114	.074	-.150
	35.00	.267	.182	.128	.104	.075	.021	-.202
	40.00	.228	.148	.091	.062	.039	.022	-.234
	45.00	.200	.105	.058	.024	.002	-.072	-.256
	50.00	.141	.063	.025	-.014	-.041	-.118	-.263
	55.00	.135	.026	-.002	-.050	-.078	-.164	-.256
	60.00	.093	-.025	-.037	-.081	-.101	-.220	-.244
	65.00	.055	-.071	-.085	-.146	-.140	-.231	-.270
	70.00	-.008						-.280
	75.00	-.128	.204	-.115	-.058	-.035	-.131	-.282
	80.00	.077	.069	-.019	-.089	-.061	-.134	-.303
	85.00	.061	.005	-.073	-.097	-.127	-.199	-.302
	90.00	.032	-.046	-.141	-.135	-.165	-.263	-.286
	95.00	.011	-.117	-.176	-.173	-.191	-.286	-.288
	GAP		-.776	-.736	-.455	-.616	-.325	
	M = 0.94 $\alpha = 15.7^{\circ}$							
UPPER SURFACE	.00	-.156	-.968	-1.047	-.679	-.576	-.521	-.609
	1.25	-.414	-1.390	-1.175	-.670	-.567	-.525	-.559
	2.50	-.629	-1.364	-1.108	-.665	-.567	-.520	-.556
	5.00	-.799	-1.385	-1.129	-.669	-.567	-.511	-.557
	7.50	-.841	-1.394	-1.102	-.673	-.567	-.520	-.561
	10.00	-.831	-1.374	-1.087	-.681	-.567	-.520	-.553
	15.00	-.818	-1.314	-1.062	-.690	-.571	-.521	-.554
	20.00	-.757	-1.313	-1.016	-.688	-.571	-.519	-.553
	25.00	-.709	-1.298	-1.009	-.688	-.570	-.507	-.552
	30.00	-.671	-1.281	-1.005	-.691	-.571	-.515	-.554
	35.00	-.643	-1.279	-.972	-.695	-.568	-.511	-.556
	40.00	-.634	-1.130	-.935	-.686	-.568	-.503	-.552
	45.00	-.633	-.629	-.915	-.673	-.561	-.497	-.551
	50.00	-.655	-.117	-.892	-.655	-.557	-.497	-.550
	55.00	-.536	-.037	-.886	-.641	-.549	-.492	-.547
	60.00	-.420	-.051	-.831	-.557	-.538	-.493	-.535
	65.00	-.290	-.270	-.819	-.633	-.539	-.500	-.550
	70.00	-.088	-.188	-.774	-.582	-.572	-.497	-.548
	75.00	-1.092	-.925	-.691	-.600	-.513	-.475	-.528
	80.00	-.747	-.931	-.772	-.608	-.518	-.482	-.518
	85.00	-.624	-.885	-.702	-.599	-.517	-.485	-.511
	90.00	-.628	-.821	-.672	-.587	-.517	-.484	-.494
	95.00	-.526	-.727	-.647	-.589	-.510	-.474	-.474
LOWER SURFACE	1.25	.365	.633	.551	.584	.500	.480	.463
	2.50	.534	.651	.585	.571	.522	.508	.467
	5.00	.699	.620	.552	.546	.491	.462	.422
	7.50	.729	.575	.519	.497	.452	.431	.359
	10.00	.685	.547	.488	.458	.411	.398	.304
	15.00	.628	.478	.430	.390	.359	.324	.192
	20.00	.540	.429	.375	.344	.303	.265	.075
	25.00	.499	.380	.328	.293	.256	.210	-.006
	30.00	.447	.339	.286	.255	.215	.164	-.087
	35.00	.391	.297	.250	.207	.173	.110	-.151
	40.00	.348	.262	.210	.170	.129	.059	-.201
	45.00	.315	.215	.173	.130	.084	.009	-.229
	50.00	.252	.171	.133	.086	.044	-.049	-.261
	55.00	.246	.134	.096	.044	.000	-.114	-.266
	60.00	.198	.085	.060	.001	-.033	-.164	-.263
	65.00	.156	.027	-.006	-.065	-.094	-.201	-.307
	70.00	.064						-.340
	75.00	-.018	.272	.202	-.147	.070	-.107	-.355
	80.00	.181	.134	.061	-.006	-.046	-.125	-.386
	85.00	.128	.066	.005	-.045	-.131	-.220	-.412
	90.00	.076	.002	-.069	-.111	-.194	-.305	-.423
	95.00	.050	-.079	-.116	-.182	-.244	-.355	-.429
	GAP		-.739	-.772	-.548	-.624	-.463	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.94   α = 20.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	−.046	−1.192	−.977	−.847	−.654	−.632	−.659
1.25	−.522	−1.288	−.969	−.757	−.654	−.629	−.643
2.50	−.793	−1.260	−.942	−.752	−.656	−.638	−.642
5.00	−1.047	−1.261	−.978	−.750	−.656	−.616	−.639
7.50	−1.070	−1.245	−.968	−.745	−.656	−.626	−.641
10.00	−1.060	−1.327	−.970	−.764	−.660	−.625	−.633
15.00	−1.050	−1.180	−.960	−.724	−.667	−.622	−.631
20.00	−.924	−1.172	−.932	−.705	−.671	−.618	−.631
25.00	−.807	−1.144	−.911	−.707	−.671	−.605	−.633
30.00	−.727	−1.125	−.894	−.706	−.675	−.611	−.638
35.00	−.694	−1.108	−.881	−.706	−.675	−.611	−.641
40.00	−.707	−1.080	−.858	−.699	−.672	−.607	−.640
45.00	−.718	−1.041	−.838	−.694	−.666	−.602	−.640
50.00	−.742	−.979	−.814	−.688	−.661	−.604	−.639
55.00	−.682	−.944	−.798	−.683	−.653	−.606	−.635
60.00	−.590	−.975	−.776	−.605	−.643	−.615	−.624
65.00	−.470	−.859	−.784	−.680	−.634	−.630	−.634
70.00	−.337	−.797	−.730	−.648	−.671	−.633	−.627
75.00	−1.045	−.912	−.742	−.671	−.613	−.559	−.605
80.00	−.877	−.939	−.754	−.677	−.621	−.569	−.589
85.00	−.695	−.795	−.748	−.673	−.621	−.575	−.579
90.00	−.700	−.713	−.737	−.668	−.621	−.570	−.565
95.00	−.610	−.663	−.733	−.662	−.616	−.556	−.548

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.277	.627	.518	.574	.452	.425	.419
2.50	.507	.702	.611	.596	.531	.515	.477
5.00	.776	.706	.617	.602	.535	.504	.470
7.50	.837	.679	.599	.562	.513	.475	.420
10.00	.792	.654	.573	.535	.480	.464	.378
15.00	.743	.594	.529	.483	.437	.397	.273
20.00	.666	.546	.475	.436	.382	.340	.153
25.00	.620	.499	.435	.392	.337	.288	.082
30.00	.570	.457	.390	.358	.293	.239	−.001
35.00	.515	.416	.350	.307	.251	.186	−.070
40.00	.469	.377	.310	.263	.207	.133	−.084
45.00	.437	.331	.272	.221	.161	.079	−.167
50.00	.374	.284	.239	.177	.114	.022	−.195
55.00	.365	.248	.195	.132	.071	−.038	−.198
60.00	.315	.198	.147	.082	.025	−.095	−.234
65.00	.271	.132	.075	.013	−.042	−.116	−.272
70.00	.164						−.302
75.00	.102	.354	.263	.210	.135	−.007	−.331
80.00	.269	.214	.132	.051	−.003	−.096	−.368
85.00	.205	.142	.050	−.004	−.085	−.192	−.403
90.00	.146	.074	−.023	−.079	−.162	−.271	−.440
95.00	.107	−.013	−.087	−.156	−.219	−.333	−.468
GAP		−.690	−.716	−.584	−.693	−.493	

M = 0.94   α = 24.2°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	−.094	−.944	−.942	−.838	−.760	−.891	−.749
1.25	−.415	−.931	−.896	−.796	−.756	−.755	−.731
2.50	−.884	−.924	−.867	−.794	−.751	−.731	−.724
5.00	−.933	−.930	−.888	−.795	−.751	−.688	−.704
7.50	−.919	−.927	−.881	−.790	−.751	−.690	−.710
10.00	−.916	−.931	−.886	−.788	−.751	−.691	−.711
15.00	−.919	−.923	−.888	−.795	−.746	−.693	−.705
20.00	−.918	−.933	−.887	−.787	−.746	−.695	−.704
25.00	−.912	−.934	−.878	−.793	−.747	−.694	−.704
30.00	−.899	−.928	−.869	−.786	−.747	−.692	−.706
35.00	−.877	−.929	−.860	−.779	−.745	−.691	−.710
40.00	−.854	−.926	−.846	−.778	−.743	−.695	−.713
45.00	−.833	−.919	−.837	−.774	−.741	−.700	−.713
50.00	−.832	−.909	−.829	−.766	−.737	−.719	−.714
55.00	−.793	−.903	−.821	−.757	−.738	−.739	−.703
60.00	−.765	−.907	−.815	−.670	−.735	−.739	−.696
65.00	−.667	−.879	−.796	−.734	−.718	−.744	−.690
70.00	−.535	−.885	−.789	−.720	−.797	−.771	−.691
75.00	−.917	−.840	−.786	−.730	−.698	−.635	−.680
80.00	−.822	−.836	−.795	−.737	−.710	−.645	−.667
85.00	−.768	−.812	−.795	−.734	−.713	−.648	−.649
90.00	−.776	−.797	−.787	−.734	−.709	−.635	−.649
95.00	−.716	−.787	−.781	−.728	−.697	−.624	−.634

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.170	.596	.465	.508	.389	.348	.353
2.50	.439	.725	.618	.590	.525	.503	.465
5.00	.828	.765	.660	.637	.567	.531	.496
7.50	.887	.752	.657	.608	.559	.520	.466
10.00	.854	.737	.644	.592	.541	.514	.431
15.00	.829	.688	.608	.550	.504	.459	.344
20.00	.761	.645	.561	.506	.458	.410	.238
25.00	.718	.601	.519	.461	.414	.360	.161
30.00	.672	.557	.478	.424	.373	.310	.078
35.00	.618	.515	.437	.381	.330	.260	.016
40.00	.572	.475	.395	.339	.286	.208	−.039
45.00	.535	.432	.356	.293	.242	.152	−.087
50.00	.475	.384	.312	.248	.196	.098	−.112
55.00	.463	.345	.269	.200	.147	.042	−.150
60.00	.410	.292	.220	.144	.101	.014	−.181
65.00	.370	.224	.145	.077	.029	−.053	−.221
70.00	.254						−.239
75.00	.208	.417	.310	.252	.191	.076	−.298
80.00	.338	.275	.165	.096	.058	.101	−.318
85.00	.269	.190	.093	.039	.025	.162	−.366
90.00	.206	.116	.014	−.039	−.102	.219	−.416
95.00	.148	.009	−.057	−.121	−.172	.293	−.469
GAP		−.614	−.684	−.581	−.691	−.470	

TABLE III WING WITH UPPER SURFACE SPOILER (WITH GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.98 α = 0.0°								
UPPER SURFACE	.00	.303	.562	.503	.833	.507	.478	.414
	1.25	.073	-.028	-.070	.019	.111	.201	.122
	2.50	.085	-.016	-.039	.018	.039	.049	.075
	5.00	.089	-.017	-.026	.005	.030	.046	.045
	7.50	.081	-.033	-.020	.024	.007	.019	.030
	10.00	.073	-.047	-.031	.022	-.014	.010	-.029
	15.00	.032	-.065	-.017	.005	-.006	.023	-.081
	20.00	-.003	-.081	.005	-.013	-.014	-.010	-.165
	25.00	-.033	-.093	.022	-.013	-.008	-.006	-.164
	30.00	-.049	-.077	.035	-.025	-.011	-.002	-.109
	35.00	-.052	-.031	.059	-.038	-.030	-.016	-.083
	40.00	-.068	-.053	.087	-.062	-.062	-.029	-.082
	45.00	-.078	.148	.137	-.104	-.105	-.056	-.097
	50.00	-.046	.240	.203	-.167	-.170	-.109	-.136
	55.00	-.054	.348	.281	-.249	-.258	-.183	-.192
	60.00	-.146	.376	.303	-.322	-.311	-.210	-.189
	65.00	-.231	.363	.270	-.328	-.316	-.198	-.154
	70.00	-.373	.299	.286	-.342	-.338	-.189	-.158
	75.00	-.624	-.819	-.523	-.424	-.351	-.290	-.168
	80.00	-.648	-.866	-.524	-.424	-.353	-.285	-.179
	85.00	-.581	-.779	-.519	-.423	-.349	-.274	-.187
	90.00	-.554	-.705	-.514	-.423	-.344	-.252	-.198
	95.00	-.416	-.602	-.507	-.400	-.339	-.310	-.198
LOWER SURFACE	1.25	.258	-.007	-.034	-.105	-.223	-.284	-.392
	2.50	.205	-.006	-.025	-.085	-.160	-.225	-.296
	5.00	.157	-.007	-.030	-.032	-.163	-.229	-.235
	7.50	.104	-.012	-.053	-.068	-.179	-.219	-.265
	10.00	.079	-.023	-.061	-.085	-.192	-.185	-.275
	15.00	.046	-.055	-.093	-.154	-.203	-.240	-.257
	20.00	-.003	-.072	-.116	-.173	-.225	-.272	-.315
	25.00	.005	-.094	-.147	-.206	-.264	-.312	-.366
	30.00	-.040	-.111	-.162	-.205	-.276	-.322	-.344
	35.00	-.063	-.134	-.186	-.233	-.293	-.343	-.290
	40.00	-.074	-.149	-.211	-.261	-.326	-.371	-.333
	45.00	-.097	-.179	-.236	-.300	-.364	-.409	-.377
	50.00	-.096	-.208	-.268	-.345	-.394	-.433	-.381
	55.00	-.144	-.205	-.297	-.371	-.429	-.476	-.402
	60.00	-.164	-.238	-.330	-.391	-.430	-.461	-.378
	65.00	-.159	-.267	-.331	-.352	-.314	-.312	-.212
	70.00	-.215						-.237
	75.00	-.383	-.094	-.129	-.187	-.251	-.291	-.263
	80.00	-.185	-.177	-.182	-.224	-.270	-.352	-.186
	85.00	-.199	-.179	-.179	-.217	-.292	-.294	-.174
	90.00	-.207	-.179	-.201	-.250	-.291	-.219	-.160
	95.00	-.214	-.145	-.230	-.282	-.297	-.250	-.128
	GAP		-.833	-.597	-.441	-.380	-.294	
M = 0.98 α = 3.9°								
UPPER SURFACE	.00	.314	-.292	-.178	-.449	-.048	-.057	-.152
	1.25	.079	-.707	-.838	-.800	-.736	-.749	-.770
	2.50	.022	-.636	-.763	-.818	-.682	-.746	-.713
	5.00	-.046	-.278	-.576	-.729	-.485	-.576	-.526
	7.50	-.083	-.263	-.326	-.570	-.344	-.303	-.420
	10.00	-.094	-.257	-.341	-.333	-.292	-.263	-.291
	15.00	-.123	-.248	-.333	-.150	-.237	-.237	-.258
	20.00	-.144	-.247	-.319	-.118	-.202	-.190	-.253
	25.00	-.169	-.253	-.228	-.101	-.165	-.147	-.167
	30.00	-.179	-.254	-.063	-.081	-.116	-.117	-.116
	35.00	-.177	-.269	-.024	-.059	-.069	-.073	-.098
	40.00	-.194	-.204	-.017	-.016	-.019	-.030	-.090
	45.00	-.216	-.079	.063	.044	.036	.019	-.104
	50.00	-.253	.200	.113	.102	.094	.071	-.128
	55.00	-.123	.229	.150	.141	.141	.107	-.173
	60.00	.119	.161	.160	.188	.164	.109	-.183
	65.00	.283	-.103	.157	.165	.172	.105	-.181
	70.00	.349	.049	.180	.178	.188	.091	-.175
	75.00	-.571	-.815	-.531	-.436	-.353	-.287	-.172
	80.00	-.551	-.840	-.547	-.434	-.353	-.282	-.168
	85.00	-.536	-.761	-.540	-.432	-.349	-.274	-.180
	90.00	-.626	-.670	-.526	-.431	-.345	-.262	-.189
	95.00	-.507	-.567	-.519	-.424	-.340	-.251	-.191
LOWER SURFACE	1.25	.385	.360	.354	.335	.315	.323	.277
	2.50	.364	.294	.276	.250	.242	.248	.199
	5.00	.330	.233	.201	.213	.149	.144	.128
	7.50	.275	.184	.154	.158	.093	.098	.055
	10.00	.237	.168	.136	.124	.058	.088	.006
	15.00	.204	.109	.074	.029	.009	.014	-.110
	20.00	.144	.075	.028	-.012	-.042	-.032	-.183
	25.00	.140	.042	-.007	-.050	-.068	-.067	-.258
	30.00	.090	.013	-.043	-.090	-.088	-.110	-.296
	35.00	.052	-.017	-.076	-.133	-.117	-.154	-.306
	40.00	.036	-.042	-.114	-.168	-.166	-.177	-.315
	45.00	-.009	-.073	-.153	-.217	-.186	-.208	-.323
	50.00	-.052	-.103	-.204	-.189	-.189	-.272	-.325
	55.00	-.042	-.112	-.246	-.181	-.232	-.314	-.336
	60.00	-.069	-.166	-.288	-.217	-.228	-.355	-.303
	65.00	-.105	-.254	-.266	-.216	-.266	-.356	-.284
	70.00	-.119						-.291
	75.00	-.332	.004	.019	.041	.144	.361	-.300
	80.00	-.117	-.073	-.077	-.148	-.200	-.320	-.289
	85.00	-.132	-.105	-.109	-.164	-.229	-.320	-.266
	90.00	-.125	-.115	-.145	-.204	-.268	-.325	-.210
	95.00	-.158	-.117	-.185	-.240	-.298	-.311	-.150
	GAP		-.842	-.678	-.414	-.398	-.305	

TABLE III　　　　　　WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.98 α = 5.9°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.309	.067	-.030	.335	-.273	-.333	-.194
1.25	-.258	-.888	-1.032	-.994	-1.009	-1.021	-1.043
2.50	-.230	-.894	-.989	-1.031	-1.014	-1.049	-1.019
5.00	-.217	-.643	-.941	-.971	-.950	-.957	-.889
7.50	-.213	-.499	-.846	-.908	-.891	-.897	-.873
10.00	-.213	-.442	-.799	-.836	-.862	-.860	-.851
15.00	-.235	-.376	-.458	-.783	-.751	-.579	-.450
20.00	-.242	-.362	-.410	-.374	-.380	-.322	-.272
25.00	-.262	-.353	-.416	-.193	-.185	-.213	-.183
30.00	-.265	-.348	-.269	-.141	-.145	-.159	-.152
35.00	-.263	-.358	-.113	-.094	-.101	-.103	-.137
40.00	-.274	-.365	-.054	-.042	-.056	-.103	-.126
45.00	-.294	-.070	-.001	.021	.008	-.048	-.129
50.00	-.334	.100	.049	.078	.047	.010	-.145
55.00	-.240	.143	.086	.126	.101	.059	-.183
60.00	-.004	.088	.104	.181	.133	.091	-.194
65.00	.130	.160	.100	.164	.147	.097	-.212
70.00	.220	-.018	.127	.175	.169	.097	-.211
75.00	-.537	-.834	-.569	-.477	-.386	-.312	-.213
80.00	-.553	-.841	-.588	-.471	-.386	-.307	-.208
85.00	-.567	-.774	-.567	-.469	-.383	-.298	-.214
90.00	-.608	-.698	-.547	-.471	-.380	-.286	-.211
95.00	-.538	-.604	-.532	-.461	-.375	-.276	-.207
LOWER SURFACE							
1.25	.430	.468	.445	.414	.417	.429	.395
2.50	.431	.392	.368	.325	.343	.354	.314
5.00	.400	.323	.286	.289	.254	.250	.234
7.50	.360	.271	.234	.240	.199	.195	.156
10.00	.315	.249	.203	.203	.166	.184	.100
15.00	.280	.180	.148	.110	.110	.101	-.020
20.00	.215	.140	.092	.066	.055	.040	-.113
25.00	.201	.103	.051	.027	.013	.000	-.207
30.00	.152	.070	.010	.006	-.028	-.036	-.267
35.00	.110	.036	-.026	-.027	-.055	-.083	-.305
40.00	.085	.012	-.070	-.063	-.087	-.128	-.334
45.00	.061	-.025	-.115	-.086	-.116	-.180	-.361
50.00	-.004	-.062	-.162	-.111	-.160	-.216	-.353
55.00	-.002	-.078	-.115	-.163	-.173	-.272	-.339
60.00	-.025	-.148	-.135	-.171	-.195	-.311	-.300
65.00	-.066	-.246	-.190	-.184	-.235	-.349	-.282
70.00	-.087						-.280
75.00	-.296	.101	-.051	-.000	-.097	-.334	-.291
80.00	-.080	.016	-.062	-.126	-.168	-.330	-.292
85.00	-.086	-.030	-.112	-.145	-.209	-.335	-.270
90.00	-.069	-.068	-.149	-.193	-.248	-.360	-.243
95.00	-.097	-.116	-.191	-.230	-.292	-.343	-.178
GAP		-.826	-.702	-.433	-.446	-.336	

M = 0.98 α = 7.9°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.313	-.139	-.184	.226	-.484	.561	.458
1.25	-.419	-1.044	-1.149	-1.121	-1.151	-1.087	-.911
2.50	-.386	-1.029	-1.105	-1.157	-1.157	-1.098	-.905
5.00	-.347	-.960	-1.098	-1.108	-1.110	-1.022	-.862
7.50	-.318	-.762	-1.036	-1.063	-1.071	-.980	-.827
10.00	-.309	-.662	-1.010	-1.016	-1.047	-.889	-.797
15.00	-.327	-.538	-.920	-.988	-.972	-.670	-.691
20.00	-.321	-.473	-.608	-.913	-.701	-.560	-.641
25.00	-.330	-.436	-.493	-.607	-.533	-.504	-.601
30.00	-.331	-.419	-.418	-.408	-.415	-.481	-.558
35.00	-.324	-.419	-.214	-.324	-.352	-.455	-.518
40.00	-.334	-.428	-.119	-.183	-.292	-.435	-.478
45.00	-.348	-.222	-.056	-.037	-.238	-.408	-.438
50.00	-.389	-.015	-.011	-.053	-.179	-.375	-.410
55.00	-.311	.081	.022	-.112	-.124	-.355	-.394
60.00	-.031	.040	.055	-.189	-.084	-.334	-.374
65.00	.145	.162	.064	-.182	-.065	-.300	-.357
70.00	.207	-.058	.095	-.194	-.042	-.259	-.349
75.00	-.676	-.838	-.606	-.507	-.434	-.391	-.334
80.00	-.614	-.834	-.627	-.501	-.446	-.395	-.319
85.00	-.554	-.785	-.598	-.499	-.439	-.380	-.295
90.00	-.526	-.722	-.570	-.502	-.427	-.359	-.283
95.00	-.519	-.637	-.560	-.491	-.412	-.333	-.261
LOWER SURFACE							
1.25	.462	.540	.511	.477	.468	.467	.432
2.50	.493	.473	.445	.392	.407	.408	.363
5.00	.469	.404	.361	.355	.324	.311	.285
7.50	.446	.350	.310	.299	.269	.257	.207
10.00	.398	.322	.278	.266	.231	.242	.152
15.00	.362	.250	.220	.184	.172	.159	-.039
20.00	.292	.204	.165	.140	.115	.099	-.050
25.00	.273	.164	.120	.099	.071	.049	-.142
30.00	.219	.128	.079	.067	.037	.007	-.209
35.00	.171	.091	.044	.031	.002	-.046	-.265
40.00	.144	.064	.005	.000	-.039	-.079	-.296
45.00	.118	.026	-.020	-.038	-.085	-.120	-.321
50.00	.056	-.012	-.047	-.083	-.099	-.179	-.332
55.00	.058	-.038	-.057	-.102	-.119	-.243	-.360
60.00	.026	-.114	-.093	-.124	-.182	-.266	-.332
65.00	-.015	-.209	-.136	-.165	-.187	-.331	-.296
70.00	-.048						-.297
75.00	-.231	.164	-.076	-.034	-.059	-.261	-.302
80.00	-.016	.036	-.030	-.111	-.140	-.254	-.301
85.00	-.000	-.018	-.079	-.121	-.183	-.304	-.294
90.00	-.003	-.050	-.126	-.171	-.231	-.347	-.274
95.00	.034	-.113	-.170	-.224	-.273	-.361	-.215
GAP		-.785	-.709	-.472	-.489	-.390	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.98   α = 11.4°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.295	-.467	-.490	-.013	-.722	-.763	-.717
1.25	-.172	-1.106	-1.092	-1.065	-.826	-.711	-.643
2.50	-.323	-1.087	-1.038	-1.059	-.820	-.686	-.635
5.00	-.441	-1.120	-.984	-1.045	-.818	-.664	-.623
7.50	-.483	-1.080	-.906	-1.030	-.817	-.674	-.624
10.00	-.483	-1.030	-.868	-.999	-.817	-.674	-.613
15.00	-.486	-.944	-.824	-.941	-.817	-.670	-.597
20.00	-.455	-.898	-.757	-.871	-.818	-.661	-.581
25.00	-.442	-.830	-.672	-.834	-.814	-.646	-.567
30.00	-.432	-.723	-.591	-.798	-.805	-.651	-.557
35.00	-.420	-.565	-.513	-.767	-.793	-.643	-.549
40.00	-.419	-.430	-.448	-.736	-.775	-.631	-.541
45.00	-.427	-.419	-.457	-.698	-.760	-.612	-.534
50.00	-.460	-.004	-.518	-.648	-.744	-.592	-.530
55.00	-.385	-.103	-.536	-.576	-.727	-.565	-.522
60.00	-.235	-.103	-.533	-.421	-.699	-.540	-.512
65.00	-.060	-.100	-.513	-.418	-.653	-.510	-.511
70.00	.230	-.023	-.468	-.385	-.712	-.488	-.510
75.00	-1.021	-.851	-.661	-.600	-.653	-.490	-.504
80.00	-.669	-.853	-.697	-.603	-.701	-.498	-.497
85.00	-.537	-.803	-.665	-.571	-.696	-.500	-.494
90.00	-.539	-.744	-.621	-.543	-.662	-.488	-.486
95.00	-.456	-.666	-.589	-.507	-.613	-.474	-.483

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.467	.638	.575	.569	.525	.508	.365
2.50	.567	.598	.541	.509	.495	.483	.324
5.00	.708	.540	.477	.468	.431	.408	.259
7.50	.613	.487	.430	.418	.381	.355	.193
10.00	.571	.458	.394	.377	.343	.337	.138
15.00	.520	.384	.339	.307	.284	.255	.032
20.00	.439	.336	.282	.258	.226	.198	-.075
25.00	.403	.291	.237	.211	.180	.143	-.153
30.00	.355	.253	.198	.177	.142	.100	-.221
35.00	.302	.216	.159	.138	.103	.055	-.268
40.00	.265	.182	.123	.097	.065	.007	-.300
45.00	.236	.142	.095	.060	.025	-.050	-.329
50.00	.182	.098	.063	.020	-.010	-.111	-.376
55.00	.173	.060	.037	-.012	-.061	-.151	-.393
60.00	.130	-.001	.005	-.034	-.111	-.188	-.350
65.00	.099	-.034	-.040	-.121	-.101	-.274	-.347
70.00	.028						-.373
75.00	-.130	.242	.169	.135	.053	-.118	-.392
80.00	.111	.112	.034	-.040	-.060	-.141	-.412
85.00	.093	.049	-.021	-.077	-.116	-.206	-.432
90.00	.057	.004	-.076	-.126	-.172	-.281	-.447
95.00	.042	-.067	-.122	-.176	-.215	-.319	-.468
GAP		-.724	-.724	-.544	-.731	-.472	

M = 0.98   α = 15.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.187	-.849	-.921	-.706	-.563	-.630	-.658
1.25	-.319	-1.257	-1.178	-.849	-.552	-.660	-.589
2.50	-.534	-1.234	-1.111	-.842	-.554	-.628	-.588
5.00	-.701	-1.254	-1.143	-.829	-.563	-.611	-.590
7.50	-.742	-1.260	-1.124	-.822	-.580	-.626	-.592
10.00	-.736	-1.243	-1.143	-.841	-.597	-.628	-.590
15.00	-.726	-1.186	-1.146	-.812	-.640	-.631	-.590
20.00	-.670	-1.186	-1.115	-.808	-.679	-.633	-.588
25.00	-.627	-1.175	-1.083	-.836	-.699	-.621	-.585
30.00	-.593	-1.158	-1.047	-.847	-.711	-.626	-.587
35.00	-.564	-1.147	-1.024	-.896	-.711	-.619	-.584
40.00	-.555	-1.063	-1.016	-.867	-.708	-.614	-.580
45.00	-.557	-.695	-1.025	-.819	-.702	-.609	-.575
50.00	-.579	-.266	-1.040	-.799	-.689	-.600	-.571
55.00	-.493	-.094	-1.146	-.780	-.678	-.589	-.566
60.00	-.392	-.093	-1.110	-.670	-.665	-.580	-.563
65.00	-.290	-.358	-.900	-.756	-.648	-.572	-.566
70.00	-.080	-.118	-.855	-.727	-.630	-.563	-.572
75.00	-.992	-.780	-.804	-.643	-.636	-.579	-.569
80.00	-.709	-.771	-.939	-.729	-.648	-.581	-.568
85.00	-.602	-.748	-.744	-.720	-.644	-.570	-.564
90.00	-.619	-.705	-.637	-.700	-.628	-.565	-.559
95.00	-.524	-.640	-.578	-.690	-.613	-.561	-.550

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.398	.669	.581	.593	.524	.494	.479
2.50	.575	.683	.609	.586	.542	.526	.489
5.00	.748	.652	.578	.565	.509	.483	.448
7.50	.766	.608	.541	.520	.471	.440	.385
10.00	.721	.577	.510	.480	.434	.421	.339
15.00	.665	.511	.457	.418	.381	.349	.238
20.00	.580	.463	.404	.372	.328	.294	.125
25.00	.536	.416	.357	.320	.282	.239	.051
30.00	.485	.375	.315	.284	.239	.194	-.032
35.00	.429	.333	.278	.240	.200	.144	-.097
40.00	.385	.297	.239	.198	.161	.098	-.128
45.00	.353	.254	.206	.157	.120	.048	-.184
50.00	.296	.208	.167	.115	.081	-.007	-.210
55.00	.286	.172	.131	.074	.043	-.069	-.240
60.00	.240	.125	.094	.031	.011	-.121	-.202
65.00	.203	.070	.033	-.034	-.047	-.176	-.246
70.00	.105						-.283
75.00	.003	.308	.229	.210	.136	-.053	-.311
80.00	.216	.173	.090	.040	.022	-.116	-.335
85.00	.159	.104	-.029	-.009	-.063	-.187	-.364
90.00	.103	.043	-.036	-.046	-.129	-.262	-.394
95.00	.070	-.036	-.088	-.106	-.189	-.312	-.443
GAP		-.654	-.727	-.638	-.662	-.516	

TABLE III WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 0.98 α = 20.2°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.053	-1.079	-1.144	-.736	-.717	-.682	-.698
1.25	-.409	-1.307	-1.171	-.673	-.717	-.703	-.688
2.50	-.698	-1.283	-1.111	-.673	-.720	-.689	-.688
5.00	-.941	-1.301	-1.146	-.688	-.720	-.673	-.676
7.50	-.968	-1.306	-1.117	-.690	-.725	-.685	-.685
10.00	-.951	-1.309	-1.110	-.699	-.727	-.686	-.686
15.00	-.931	-1.264	-1.074	-.723	-.732	-.687	-.686
20.00	-.853	-1.275	-1.053	-.762	-.736	-.685	-.685
25.00	-.773	-1.279	-1.053	-.796	-.737	-.672	-.684
30.00	-.716	-1.236	-1.066	-.807	-.736	-.683	-.683
35.00	-.683	-1.282	-1.044	-.807	-.732	-.683	-.683
40.00	-.669	-1.292	-1.010	-.804	-.730	-.683	-.681
45.00	-.667	-1.215	-.984	-.795	-.726	-.678	-.679
50.00	-.680	-.906	-.961	-.784	-.721	-.672	-.680
55.00	-.603	-.530	-.924	-.772	-.714	-.669	-.680
60.00	-.514	-.369	-.888	-.677	-.707	-.669	-.675
65.00	-.474	-.396	-.874	-.759	-.697	-.666	-.673
70.00	-.379	-.269	-.849	-.728	-.723	-.669	-.682
75.00	-.945	-1.015	-.741	-.751	-.679	-.646	-.672
80.00	-.786	-1.082	-.831	-.771	-.686	-.649	-.670
85.00	-.651	-1.019	-.825	-.757	-.688	-.651	-.661
90.00	-.633	-.872	-.818	-.745	-.682	-.648	-.650
95.00	-.580	-.656	-.814	-.723	-.673	-.641	-.635
LOWER SURFACE							
1.25	.300	.660	.549	.564	.478	.447	.432
2.50	.545	.732	.645	.607	.556	.536	.494
5.00	.819	.732	.644	.622	.560	.530	.490
7.50	.870	.705	.628	.590	.539	.503	.445
10.00	.823	.679	.603	.564	.508	.492	.402
15.00	.777	.622	.559	.510	.468	.427	.312
20.00	.696	.575	.505	.467	.417	.375	.203
25.00	.652	.527	.465	.420	.373	.324	.129
30.00	.603	.486	.425	.381	.332	.276	.048
35.00	.549	.443	.386	.336	.288	.224	-.018
40.00	.504	.408	.347	.295	.248	.179	-.079
45.00	.471	.363	.306	.253	.206	.124	-.110
50.00	.411	.318	.266	.212	.162	.066	-.161
55.00	.400	.282	.229	.170	.118	.007	-.139
60.00	.351	.231	.182	.122	.080	-.048	-.165
65.00	.311	.171	.118	.057	.009	-.087	-.213
70.00	.202						-.271
75.00	.128	.384	.300	.256	.182	-.034	-.283
80.00	.300	.247	.164	.096	.059	-.098	-.307
85.00	.233	.180	.105	.042	.025	-.158	-.347
90.00	.171	.107	.034	-.021	-.096	-.215	-.389
95.00	.122	.015	-.023	-.099	-.157	-.280	-.434
GAP		-.619	-.687	-.572	-.680	-.500	

M = 1.00 α = -0.1°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.311	.573	.509	.830	.510	.483	.401
1.25	.135	.001	-.045	.051	.136	.325	.147
2.50	.128	.011	-.022	.049	.063	.083	.098
5.00	.118	-.005	-.019	.040	.056	.067	.073
7.50	.109	-.013	-.014	.054	.029	.036	.054
10.00	.091	-.028	-.015	.049	.008	.028	-.010
15.00	.055	-.047	-.004	.030	.012	.005	-.074
20.00	.020	-.066	-.026	.034	.005	.004	-.150
25.00	-.010	-.082	-.048	.047	.031	.011	-.169
30.00	-.029	-.075	-.061	.061	.046	.014	-.078
35.00	-.033	-.027	-.080	.084	.079	.029	-.073
40.00	-.054	.090	-.109	.124	.117	.037	-.091
45.00	-.070	.167	-.158	.185	.178	.060	-.139
50.00	-.039	.257	-.222	.269	.265	.105	-.225
55.00	.073	.362	-.302	.365	.321	.179	-.259
60.00	.232	.404	-.322	.350	.329	.224	-.256
65.00	.328	.391	-.288	.362	.129	.228	-.256
70.00	.425	.326	-.306	.362	.129	.216	-.264
75.00	.549	.830	-.525	.455	.422	.346	-.259
80.00	.568	.887	-.531	.462	.430	.342	-.265
85.00	.602	.798	-.528	.458	.429	.334	-.272
90.00	.473	.720	-.527	.460	.427	.317	-.265
95.00	.393	.601	-.520	.466	.428	.311	-.265
LOWER SURFACE							
1.25	.269	-.008	-.035	-.107	-.230	-.299	-.402
2.50	.217	-.010	-.018	-.083	-.163	-.233	-.309
5.00	.172	-.022	-.027	-.030	-.158	-.223	-.241
7.50	.122	-.002	-.048	-.068	-.172	-.218	-.264
10.00	.095	-.003	-.062	-.085	-.187	-.182	-.272
15.00	.059	-.042	-.087	-.143	-.198	-.236	-.309
20.00	.010	-.060	-.113	-.161	-.218	-.268	-.364
25.00	.015	-.083	-.141	-.196	-.256	-.303	-.345
30.00	-.032	-.102	-.155	-.195	-.262	-.311	-.306
35.00	-.054	-.124	-.181	-.225	-.281	-.336	-.332
40.00	-.063	-.143	-.202	-.250	-.312	-.362	-.388
45.00	-.085	-.170	-.231	-.289	-.349	-.397	-.403
50.00	-.105	-.199	-.257	-.325	-.379	-.427	-.432
55.00	-.134	-.193	-.281	-.354	-.414	-.475	-.438
60.00	-.153	-.225	-.319	-.376	-.424	-.493	-.359
65.00	-.153	-.256	-.329	-.355	-.368	-.400	-.320
70.00	-.198						-.275
75.00	-.368	-.101	-.141	-.200	-.226	-.286	-.220
80.00	-.177	-.182	-.191	-.221	-.260	-.331	-.230
85.00	-.195	-.182	-.181	-.212	-.287	-.283	-.243
90.00	-.207	-.187	-.196	-.244	-.290	-.243	-.234
95.00	-.211	-.148	-.225	-.269	-.297	-.273	
GAP		-.837	-.597	-.474	-.450	-.367	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.00   α = 3.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.325	.328	.223	.487	.083	.018	.206
1.25	-.148	-.657	-.786	-.755	-.677	-.711	-.719
2.50	-.095	-.585	-.720	-.777	-.627	-.698	-.666
5.00	-.074	-.247	-.507	-.686	-.446	-.547	-.481
7.50	-.071	-.237	-.302	-.524	-.327	-.281	-.371
10.00	-.074	-.230	-.306	-.321	-.265	-.250	-.255
15.00	-.099	-.222	-.302	-.145	-.207	-.223	-.220
20.00	-.119	-.223	-.296	-.108	-.183	-.175	-.232
25.00	-.146	-.228	-.233	-.086	-.150	-.133	-.156
30.00	-.156	-.233	-.044	-.056	-.108	-.102	-.104
35.00	-.154	-.249	-.005	-.031	-.060	-.061	-.084
40.00	-.172	-.205	-.033	-.009	-.009	-.018	-.076
45.00	-.194	.090	.081	.065	.050	.028	.092
50.00	-.232	.211	.132	.120	.110	.083	.130
55.00	-.107	.238	.172	.163	.157	.120	.188
60.00	.108	.174	.183	.209	.181	.128	.230
65.00	.268	-.099	.183	.186	.189	.121	.253
70.00	.355	.070	.204	.199	.203	.108	.244
75.00	-.517	-.802	-.537	-.471	-.414	-.335	-.235
80.00	-.554	-.849	-.555	-.471	-.418	-.330	-.222
85.00	-.628	-.763	-.550	-.471	-.418	-.330	-.229
90.00	-.566	-.676	-.540	-.471	-.418	-.323	-.231
95.00	-.481	-.566	-.529	-.474	-.417	-.311	-.232

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.392	.363	.356	.328	.318	.301	.266
2.50	.373	.299	.284	.249	.246	.209	.189
5.00	.355	.240	.210	.211	.156	.129	.124
7.50	.285	.193	.163	.151	.100	.081	.055
10.00	.246	.177	.133	.116	.061	.078	.012
15.00	.213	.119	.088	.039	.020	.011	-.098
20.00	.155	.082	.041	-.001	-.040	-.044	-.153
25.00	.148	.051	-.005	-.040	-.086	-.084	-.245
30.00	.100	.021	-.027	-.075	-.118	-.121	-.291
35.00	.063	-.008	-.055	-.119	-.136	-.160	-.302
40.00	.044	-.030	-.092	-.156	-.150	-.175	-.309
45.00	-.020	-.065	-.131	-.201	-.179	-.223	-.317
50.00	-.044	-.096	-.180	-.241	-.214	-.252	-.331
55.00	-.034	-.097	-.220	-.209	-.215	-.316	-.331
60.00	-.057	-.150	-.263	-.218	-.240	-.345	-.323
65.00	-.096	-.236	-.281	-.248	-.262	-.379	-.280
70.00	-.104						-.279
75.00	-.314	-.000	.012	-.030	-.105	-.309	-.278
80.00	-.108	-.075	.072	-.137	-.170	-.280	-.289
85.00	-.123	-.100	.107	-.148	-.207	-.296	-.290
90.00	-.120	-.129	-.138	-.188	-.240	-.317	-.293
95.00	-.157	-.124	-.178	-.227	-.274	-.326	-.272
GAP		-.826	-.679	-.443	-.474	-.348	

M = 1.00   α = 5.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.327	.127	.035	.378	.179	.245	.115
1.25	-.401	-.819	-.966	-.934	-.940	-.966	-.974
2.50	-.279	-.822	-.925	-.974	-.943	-.976	-.955
5.00	-.226	-.579	-.874	-.917	-.885	-.889	-.825
7.50	-.201	-.449	-.789	-.850	-.836	-.835	-.812
10.00	-.180	-.395	-.737	-.786	-.805	-.803	-.796
15.00	-.194	-.333	-.397	-.738	-.707	-.570	-.436
20.00	-.200	-.318	-.362	-.354	-.334	-.246	-.252
25.00	-.221	-.313	-.372	-.167	-.153	-.190	-.159
30.00	-.227	-.310	-.236	-.118	-.117	-.168	-.133
35.00	-.226	-.321	-.076	-.070	-.078	-.128	-.114
40.00	-.239	-.328	-.019	-.019	-.031	-.076	-.102
45.00	-.259	-.047	.032	.039	.003	.022	-.112
50.00	-.298	.130	.080	.095	.066	.036	-.143
55.00	-.207	.176	.113	.145	.117	.085	-.200
60.00	.006	.129	.129	.203	.153	.113	-.235
65.00	-.140	-.124	.128	.181	.161	.101	-.262
70.00	.247	.016	.156	.193	.181	.117	-.258
75.00	-.580	-.818	-.558	-.493	-.433	-.347	-.257
80.00	-.588	-.838	-.581	-.493	-.441	-.345	-.249
85.00	-.599	-.755	-.560	-.494	-.441	-.341	-.255
90.00	-.573	-.677	-.540	-.494	-.440	-.329	-.254
95.00	-.527	-.582	-.529	-.494	-.435	-.316	-.248

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.439	.474	.459	.413	.392	.424	.391
2.50	.442	.401	.381	.320	.302	.350	.311
5.00	.416	.332	.299	.287	.248	.250	.233
7.50	.370	.282	.252	.238	.194	.195	.162
10.00	.327	.259	.216	.199	.155	.179	.109
15.00	.292	.192	.164	.111	.113	.072	-.004
20.00	.230	.153	.113	.066	.060	.029	-.097
25.00	.217	.115	.069	.022	.000	.003	-.186
30.00	.164	.083	.033	-.017	-.022	-.038	-.254
35.00	.124	.050	.000	-.055	-.057	-.074	-.300
40.00	.099	.026	-.041	-.058	-.089	-.098	-.321
45.00	.076	-.011	-.089	-.072	-.109	-.157	-.335
50.00	.011	-.043	-.143	-.092	-.421	-.217	-.353
55.00	.021	-.054	-.183	-.139	-.184	-.245	-.335
60.00	-.009	-.120	-.164	-.169	-.183	-.305	-.321
65.00	-.044	-.215	-.176	-.180	-.235	-.339	-.263
70.00	-.063						-.268
75.00	-.277	-.068	-.090	-.007	-.059	-.278	-.277
80.00	-.069	-.008	-.028	-.113	-.141	-.281	-.287
85.00	-.083	-.049	-.077	-.126	-.218	-.304	-.295
90.00	-.080	-.075	-.114	-.167	-.222	-.335	-.304
95.00	-.115	-.092	-.161	-.208	-.261	-.339	-.283
GAP		-.819	-.674	-.441	-.500	-.361	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

M = 1.00 α = 7.8°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.331	-.069	-.126	-.269	-.404	-.483	-.383
1.25	-.500	-.991	-1.071	-1.046	-1.064	-1.069	-.984
2.50	-.416	-.965	-1.030	-1.079	-1.072	-1.073	-.978
5.00	-.344	-.890	-1.016	-1.033	-1.029	-.994	-.895
7.50	-.299	-.687	-.956	-.988	-.990	-.965	-.860
10.00	-.278	-.557	-.929	-.931	-.976	-.895	-.821
15.00	-.286	-.446	-.826	-.915	-.903	-.649	-.646
20.00	-.282	-.410	-.564	-.823	-.652	-.490	-.547
25.00	-.294	-.391	-.450	-.564	-.476	-.427	-.505
30.00	-.292	-.378	-.399	-.362	-.358	-.406	-.462
35.00	-.287	-.382	-.188	-.285	-.296	-.383	-.434
40.00	-.298	-.393	-.088	-.146	-.249	-.370	-.408
45.00	-.314	-.184	-.026	-.005	-.194	-.348	-.391
50.00	-.354	-.042	.027	-.075	-.142	-.318	-.377
55.00	-.279	-.106	.067	.134	-.094	-.302	-.378
60.00	-.109	.064	.097	.211	-.053	-.293	-.372
65.00	.057	.141	.107	.196	-.033	-.252	-.366
70.00	.169	-.032	-.132	-.213	-.033	-.230	-.363
75.00	-.623	-.829	-.591	-.515	-.449	-.433	-.366
80.00	-.627	-.839	-.617	-.516	-.464	-.435	-.349
85.00	-.567	-.767	-.581	-.514	-.461	-.427	-.332
90.00	-.503	-.698	-.558	-.514	-.452	-.405	-.323
95.00	-.517	-.608	-.546	-.510	-.436	-.388	-.309
LOWER SURFACE							
1.25	.473	.546	.517	.480	.471	.469	.435
2.50	.506	.478	.450	.391	.390	.387	.367
5.00	.482	.410	.364	.350	.324	.312	.286
7.50	.456	.355	.315	.299	.271	.255	.218
10.00	.408	.329	.282	.258	.228	.237	.162
15.00	.370	.259	.224	.183	.176	.161	.053
20.00	.302	.212	.171	.139	.122	.103	-.006
25.00	.283	.176	.137	.101	.061	.059	-.138
30.00	.228	.137	.082	.069	.040	.019	-.206
35.00	.184	.106	.048	.033	.010	-.029	-.260
40.00	.157	.075	.003	.004	-.025	-.075	-.295
45.00	.130	.038	-.034	-.023	-.068	-.122	-.324
50.00	.065	.003	-.043	-.070	-.112	-.157	-.338
55.00	.071	-.018	-.050	-.109	-.115	-.220	-.353
60.00	.039	-.093	-.080	-.119	-.149	-.259	-.354
65.00	.001	-.194	-.127	-.143	-.186	-.317	-.286
70.00	-.029						-.291
75.00	-.239	.181	.099	.054	-.032	-.230	-.299
80.00	-.025	.056	-.019	-.094	-.121	-.231	-.303
85.00	-.009	.015	-.063	-.105	-.166	-.277	-.314
90.00	-.005	.033	-.104	-.152	-.212	-.338	-.319
95.00	-.010	-.091	-.147	-.199	-.246	-.354	-.308
GAP		-.778	-.690	-.468	-.508	-.423	

M = 1.00 α = 11.4°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.302	-.441	-.459	.008	-.692	-.750	-.608
1.25	-.153	-1.080	-1.057	-1.004	-.787	-.699	-.546
2.50	-.302	-1.063	-1.018	-.992	-.781	-.676	-.538
5.00	-.418	-1.094	-.977	-.978	-.779	-.655	-.525
7.50	-.463	-1.049	-.896	-.967	-.778	-.666	-.523
10.00	-.464	-1.000	-.848	-.945	-.778	-.666	-.510
15.00	-.468	-.915	-.803	-.899	-.781	-.663	-.497
20.00	-.438	-.867	-.739	-.842	-.784	-.656	-.482
25.00	-.426	-.802	-.663	-.813	-.780	-.643	-.468
30.00	-.417	-.699	-.584	-.781	-.772	-.648	-.457
35.00	-.404	-.551	-.509	-.750	-.762	-.640	-.448
40.00	-.402	-.417	-.455	-.722	-.749	-.631	-.443
45.00	-.411	-.406	-.464	-.689	-.736	-.615	-.436
50.00	-.440	.002	-.520	-.647	-.722	-.596	-.430
55.00	-.372	-.113	-.529	-.596	-.706	-.575	-.424
60.00	-.223	-.108	-.520	-.459	-.684	-.550	-.414
65.00	-.054	-.110	-.493	-.460	-.638	-.525	-.414
70.00	-.253	-.018	-.456	-.429	-.715	-.503	-.415
75.00	-.989	-.830	-.644	-.612	-.646	-.504	-.406
80.00	-.641	-.831	-.670	-.618	-.689	-.512	-.403
85.00	-.513	-.783	-.643	-.586	-.694	-.515	-.398
90.00	-.527	-.722	-.601	-.555	-.663	-.506	-.393
95.00	-.444	-.645	-.576	-.521	-.620	-.492	-.389
LOWER SURFACE							
1.25	.472	.647	.588	.579	.531	.517	.481
2.50	.577	.606	.554	.521	.500	.493	.442
5.00	.692	.546	.489	.481	.438	.417	.374
7.50	.620	.494	.445	.428	.388	.367	.309
10.00	.578	.466	.406	.388	.348	.348	.255
15.00	.528	.395	.349	.315	.291	.267	.151
20.00	.446	.344	.293	.270	.235	.210	.048
25.00	.412	.301	.248	.221	.188	.158	.034
30.00	.362	.262	.209	.185	.149	.116	-.102
35.00	.310	.225	.175	.146	.110	.071	-.153
40.00	.271	.190	.138	.109	.074	.024	-.188
45.00	.243	.151	.107	.069	.036	-.032	-.214
50.00	.190	.108	.072	.032	.006	-.097	-.259
55.00	.181	.070	.048	.002	-.049	-.135	-.285
60.00	.138	.006	.019	-.016	-.107	-.169	-.247
65.00	.108	-.024	-.023	-.105	-.099	-.256	-.235
70.00	.034						-.258
75.00	-.153	.253	.182	.152	.071	-.101	-.281
80.00	.125	.123	.047	-.018	-.049	-.140	-.302
85.00	.094	.072	-.005	-.064	-.103	-.206	-.321
90.00	.050	.017	-.057	-.110	-.157	-.268	-.342
95.00	.033	-.052	-.105	-.164	-.202	-.305	-.365
GAP		-.706	-.704	-.544	-.726	-.481	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.00 α = 15.9°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.207	-.786	-.865	-.653	-1.149	-.712	-.627
1.25	-.270	-1.163	-1.104	-.829	-.552	-.719	-.575
2.50	-.482	-1.146	-1.042	-.821	-.548	-.684	-.576
5.00	-.646	-1.159	-1.068	-.814	-.546	-.649	-.555
7.50	-.690	-1.164	-1.053	-.811	-.548	-.648	-.567
10.00	-.684	-1.156	-1.067	-.812	-.553	-.640	-.576
15.00	-.676	-1.105	-1.064	-.837	-.582	-.627	-.575
20.00	-.623	-1.107	-1.049	-.871	-.623	-.631	-.573
25.00	-.579	-1.096	-1.023	-.937	-.667	-.627	-.574
30.00	-.547	-1.078	-.987	-.959	-.690	-.631	-.567
35.00	-.522	-1.070	-.965	-.931	-.695	-.633	-.564
40.00	-.511	-.998	-.953	-.881	-.697	-.636	-.559
45.00	-.514	-.665	-.961	-.877	-.695	-.631	-.552
50.00	-.536	-.222	-.974	-.850	-.693	-.612	-.547
55.00	-.456	-.059	-1.045	-.822	-.689	-.593	-.541
60.00	-.362	-.069	-1.059	-.691	-.678	-.580	-.533
65.00	-.243	-.328	-.886	-.739	-.648	-.558	-.520
70.00	-.031	-.084	-.900	-.725	-.773	-.556	-.528
75.00	-.959	-.788	-.832	-.772	-.597	-.556	-.530
80.00	-.684	-.783	-.947	-.841	-.630	-.564	-.528
85.00	-.562	-.755	-.768	-.877	-.644	-.564	-.524
90.00	-.600	-.710	-.664	-.842	-.636	-.556	-.525
95.00	-.511	-.641	-.616	-.771	-.624	-.547	-.520

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.418	.692	.598	.594	.538	.509	.476
2.50	.599	.703	.624	.596	.558	.539	.482
5.00	.777	.671	.587	.576	.527	.499	.444
7.50	.782	.627	.553	.530	.487	.456	.390
10.00	.736	.596	.520	.494	.451	.441	.343
15.00	.682	.531	.468	.428	.399	.367	.246
20.00	.600	.484	.414	.381	.344	.309	.148
25.00	.554	.437	.371	.332	.297	.260	.065
30.00	.504	.395	.330	.299	.256	.212	-.009
35.00	.448	.353	.293	.253	.213	.166	-.062
40.00	.405	.319	.257	.213	.175	.118	-.120
45.00	.376	.275	.221	.173	.136	.072	-.154
50.00	.319	.229	.182	.129	.096	.022	-.187
55.00	.308	.193	.146	.092	.053	-.039	-.211
60.00	.263	.147	.113	.047	.022	-.113	-.171
65.00	.227	.095	.051	-.012	.015	-.145	-.203
70.00	.127						-.253
75.00	.017	-.330	-.248	-.230	-.149	-.014	-.269
80.00	.235	-.198	-.106	-.055	-.040	-.125	-.271
85.00	.176	-.131	-.050	-.009	-.045	-.169	-.300
90.00	.118	-.071	-.013	-.045	-.100	-.208	-.338
95.00	.079	-.009	-.067	-.104	-.153	-.271	-.377
GAP		-.622	-.709	-.663	-.628	-.483	

M = 1.03 α = 0.3°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.252	.573	.507	.846	.544	.525	.449
1.25	.074	-.001	-.051	.054	.180	.304	.189
2.50	.078	-.009	-.030	.059	.113	.130	.142
5.00	.074	-.003	-.034	.054	.101	.116	.110
7.50	.070	-.013	-.044	.079	.075	.084	-.023
10.00	.068	-.028	-.067	.074	.056	.078	-.022
15.00	.042	-.043	-.080	.062	.057	.042	-.015
20.00	.012	-.062	.042	.076	.051	.053	-.098
25.00	-.020	-.080	.087	.078	.073	.059	-.113
30.00	-.031	-.093	.095	.092	.087	.063	-.081
35.00	-.033	-.096	.112	.105	.122	.079	-.028
40.00	-.055	-.049	.145	.124	.163	.087	-.023
45.00	-.083	.238	.194	.166	.220	.111	-.039
50.00	-.102	.297	.259	.223	.230	.158	-.086
55.00	-.015	.394	.339	.301	.306	.235	-.174
60.00	-.202	.430	.362	.378	.361	.280	-.213
65.00	-.342	.418	.326	.371	.372	.272	-.213
70.00	-.472	.350	.346	.386	.394	.262	-.212
75.00	-.507	-.771	-.475	-.408	-.374	-.301	-.218
80.00	-.513	-.825	-.482	-.413	-.380	-.297	-.212
85.00	-.485	-.735	-.473	-.413	-.380	-.290	-.220
90.00	-.421	-.656	-.467	-.421	-.380	-.275	-.232
95.00	-.324	-.540	-.464	-.426	-.381	-.268	-.226

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.226	.012	-.036	-.067	-.193	-.257	-.358
2.50	.186	.005	-.018	-.051	-.121	-.185	-.260
5.00	.139	.019	-.032	-.000	-.114	-.174	-.194
7.50	.091	.005	-.044	-.037	-.129	-.166	-.214
10.00	.070	.005	-.057	-.053	-.141	-.130	-.220
15.00	.044	-.036	-.084	-.114	-.152	-.185	-.210
20.00	.001	-.054	-.108	-.131	-.172	-.214	-.248
25.00	-.006	-.075	-.130	-.163	-.207	-.238	-.302
30.00	-.025	-.090	-.145	-.163	-.218	-.252	-.288
35.00	-.053	-.112	-.162	-.191	-.231	-.276	-.254
40.00	-.058	-.131	-.185	-.215	-.256	-.298	-.284
45.00	-.073	-.161	-.208	-.245	-.291	-.333	-.333
50.00	-.092	-.189	-.235	-.278	-.317	-.361	-.349
55.00	-.125	-.184	-.245	-.300	-.352	-.409	-.379
60.00	-.144	-.209	-.273	-.318	-.365	-.437	-.389
65.00	-.144	-.223	-.281	-.302	-.317	-.363	-.334
70.00	-.184						-.286
75.00	-.360	-.090	-.131	-.193	-.200	-.253	-.235
80.00	-.167	-.159	-.168	-.174	-.212	-.291	-.176
85.00	-.178	-.154	-.148	-.163	-.232	-.243	-.185
90.00	-.190	-.146	-.159	-.192	-.232	-.238	-.195
95.00	-.186	-.106	-.178	-.216	-.243	-.226	-.189
GAP		-.780	-.537	-.425	-.398	-.323	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 1.03 α = 3.8°							
UPPER SURFACE							
.00	.259	.357	.254	.529	.110	.150	.239
1.25	-.114	-.637	-.728	-.727	-.685	-.656	-.673
2.50	-.088	-.579	-.677	-.754	-.681	-.644	-.626
5.00	-.065	-.239	-.551	-.663	-.609	-.469	-.472
7.50	-.068	-.230	-.282	-.559	-.516	-.268	-.342
10.00	-.096	-.219	-.287	-.348	-.304	-.222	-.218
15.00	-.112	-.214	-.289	-.278	-.082	-.191	-.178
20.00	-.121	-.214	-.282	-.097	-.082	-.144	-.181
25.00	-.145	-.219	-.284	-.067	-.073	-.101	-.103
30.00	-.152	-.222	-.057	-.032	-.046	-.067	-.056
35.00	-.151	-.236	.016	-.003	-.011	-.022	-.040
40.00	-.166	-.244	.055	.049	.039	.019	-.030
45.00	-.188	.091	.097	.108	.090	.066	-.044
50.00	-.221	.219	.141	.160	.152	.117	-.082
55.00	-.160	.236	.171	.196	.198	.161	-.146
60.00	-.072	.144	.189	.240	.219	.174	-.191
65.00	-.217	-.108	.186	.220	.227	.165	-.221
70.00	-.337	.099	.217	.232	.241	.157	-.217
75.00	-.522	-.737	-.485	-.425	-.381	-.299	-.213
80.00	-.532	-.759	-.501	-.425	-.404	-.295	-.197
85.00	-.521	-.683	-.497	-.424	-.390	-.294	-.195
90.00	-.501	-.606	-.482	-.431	-.392	-.288	-.201
95.00	-.448	-.510	-.469	-.433	-.393	-.281	-.199
LOWER SURFACE							
1.25	.329	.353	.357	.341	.348	.353	.308
2.50	.333	.290	.289	.260	.277	.278	.234
5.00	.304	.235	.215	.225	.191	.178	.169
7.50	.266	.189	.171	.172	.136	.126	.103
10.00	.227	.177	.144	.135	.099	.119	.062
15.00	.201	.118	.097	.065	.061	.055	.046
20.00	.149	.086	.053	.029	.008	.005	-.057
25.00	.146	.056	.022	-.007	-.039	-.026	-.192
30.00	.101	.027	-.012	-.039	-.073	-.063	-.242
35.00	.063	.000	-.036	-.078	-.107	-.091	-.263
40.00	.047	-.019	-.066	-.116	-.131	-.122	-.269
45.00	.027	-.049	-.094	-.159	-.130	-.173	-.269
50.00	-.033	-.079	-.139	-.197	-.155	-.200	-.287
55.00	-.023	-.077	-.177	-.213	-.162	-.259	-.286
60.00	-.045	-.122	-.216	-.179	-.187	-.297	-.284
65.00	-.076	-.198	-.267	-.219	-.223	-.327	-.241
70.00	-.066						-.237
75.00	-.305	.015	.040	.010	-.050	-.252	-.231
80.00	-.091	-.056	-.041	-.092	-.117	-.241	-.241
85.00	-.089	-.080	-.073	-.103	-.155	-.265	-.251
90.00	-.100	-.090	-.099	-.140	-.192	-.269	-.253
95.00	-.102	-.095	-.135	-.174	-.219	-.278	-.243
GAP		-.771	-.615	-.395	-.443	-.313	
M = 1.03 α = 5.8°							
UPPER SURFACE							
.00	.278	-.171	-.076	-.423	-.140	-.197	-.241
1.25	-.308	-.844	-.904	-.879	-.891	-.905	-.669
2.50	-.244	-.795	-.867	-.913	-.910	-.918	-.626
5.00	-.204	-.675	-.830	-.857	-.864	-.831	-.466
7.50	-.182	-.388	-.751	-.806	-.820	-.794	-.342
10.00	-.192	-.315	-.721	-.742	-.780	-.763	-.219
15.00	-.187	-.294	-.452	-.717	-.688	-.617	-.177
20.00	-.187	-.286	-.332	-.543	-.487	-.276	-.181
25.00	-.205	-.284	-.347	-.176	-.162	-.231	-.102
30.00	-.206	-.283	-.290	-.086	-.073	-.163	-.059
35.00	-.204	-.290	-.061	-.040	-.035	-.096	-.039
40.00	-.214	-.304	-.008	-.020	-.010	-.048	-.030
45.00	-.233	-.031	-.057	-.076	-.051	-.003	-.044
50.00	-.267	.147	.104	.135	.098	.054	-.082
55.00	-.220	.182	.134	.182	.148	.094	-.147
60.00	-.013	.106	.153	.237	.179	.118	-.192
65.00	-.206	-.117	.153	.226	.189	.117	-.220
70.00	-.294	.047	.181	.238	.244	.116	-.214
75.00	-.604	-.741	-.508	-.449	-.401	-.322	-.211
80.00	-.565	-.749	-.532	-.449	-.413	-.318	-.195
85.00	-.507	-.675	-.504	-.451	-.417	-.310	-.195
90.00	-.470	-.605	-.482	-.455	-.417	-.301	-.197
95.00	-.444	-.522	-.469	-.453	-.415	-.291	-.197
LOWER SURFACE							
1.25	.390	.485	.478	.445	.439	.456	.309
2.50	.428	.414	.404	.357	.369	.385	.237
5.00	.409	.347	.326	.327	.281	.286	.170
7.50	.384	.299	.277	.274	.237	.231	.104
10.00	.342	.277	.246	.231	.192	.216	.060
15.00	.311	.213	.196	.155	.149	.147	-.045
20.00	.248	.175	.145	.111	.099	.089	-.056
25.00	.237	.141	.108	.065	.062	.042	-.193
30.00	.190	.110	.073	.029	.023	.005	-.241
35.00	.148	.080	.039	-.015	-.011	-.041	-.264
40.00	.127	.059	.002	-.047	-.043	-.061	-.268
45.00	.108	.024	-.040	-.035	-.066	-.106	-.268
50.00	.047	-.004	-.093	-.042	-.084	-.166	-.286
55.00	.055	-.012	-.132	-.080	-.134	-.202	-.285
60.00	.027	-.073	-.157	-.113	-.136	-.254	-.282
65.00	.001	-.163	-.139	-.132	-.184	-.289	-.242
70.00	-.026						-.235
75.00	-.252	.096	.132	.048	-.019	-.222	-.230
80.00	-.029	.025	-.029	-.065	-.095	-.236	-.242
85.00	-.029	-.073	-.024	-.080	-.135	-.263	-.250
90.00	-.047	-.066	-.061	-.117	-.175	-.296	-.253
95.00	-.035	-.055	-.111	-.158	-.213	-.303	-.242
GAP		-.756	-.617	-.401	-.468	-.332	

TABLE III   WING WITH UPPER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 1.03 α = 7.8°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.284	-.024	-.085	.308	-.352	-.423	-.083
1.25	-.521	-.963	-1.008	-.980	-1.002	-.969	-.921
2.50	-.430	-.920	-.967	-1.017	-1.012	-.969	-.900
5.00	-.359	-.889	-.964	-.968	-.975	-.897	-.785
7.50	-.304	-.763	-.903	-.925	-.935	-.862	-.774
10.00	-.260	-.548	-.881	-.880	-.913	-.788	-.758
15.00	-.267	-.390	-.807	-.865	-.839	-.587	-.541
20.00	-.263	-.360	-.640	-.812	-.644	-.464	-.239
25.00	-.273	-.348	-.439	-.578	-.428	-.411	-.133
30.00	-.268	-.342	-.385	-.368	-.329	-.390	-.111
35.00	-.265	-.346	-.195	-.315	-.283	-.369	-.102
40.00	-.271	-.357	-.076	-.217	-.255	-.361	-.088
45.00	-.289	-.172	-.001	-.024	-.224	-.364	-.093
50.00	-.319	-.067	.058	.125	-.197	-.324	-.119
55.00	-.276	-.124	.099	.184	-.181	-.317	-.169
60.00	-.044	-.070	.133	.267	-.167	-.312	-.198
65.00	-.158	-.114	.142	.274	-.142	-.293	-.230
70.00	-.242	-.000	.170	.295	-.214	-.247	-.231
75.00	-.661	-.753	-.543	-.462	-.425	-.430	-.233
80.00	-.634	-.756	-.565	-.457	-.448	-.435	-.224
85.00	-.511	-.693	-.526	-.457	-.435	-.437	-.224
90.00	-.443	-.627	-.498	-.460	-.402	-.394	-.226
95.00	-.445	-.545	-.488	-.457	-.384	-.375	-.218

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.422	.571	.541	.513	.504	.225	.420
2.50	.499	.502	.476	.430	.444	.442	.344
5.00	.494	.435	.394	.387	.365	.332	.269
7.50	.484	.384	.349	.336	.309	.294	.198
10.00	.435	.358	.313	.293	.273	.281	.146
15.00	.401	.289	.260	.223	.220	.204	.042
20.00	.329	.246	.208	.180	.162	.124	-.075
25.00	.308	.209	.166	.144	.118	.064	-.133
30.00	.258	.174	.125	.114	.081	.066	-.201
35.00	.211	.143	.090	.081	.054	.016	-.252
40.00	.186	.116	.042	.047	.018	-.025	-.276
45.00	.163	.080	.003	.028	-.013	-.073	-.295
50.00	.103	.047	.022	.018	-.063	-.107	-.310
55.00	.104	.028	.004	-.062	-.078	-.166	-.310
60.00	.074	-.044	-.032	-.074	-.097	-.221	-.284
65.00	.041	-.140	-.077	-.091	-.136	-.261	-.226
70.00	-.006						-.230
75.00	-.238	.208	.145	.096	.021	-.165	-.230
80.00	.013	.114	.028	.044	.070	-.187	-.244
85.00	.013	-.101	-.025	-.062	-.110	-.237	-.253
90.00	.006	-.068	-.058	-.105	-.152	-.285	-.267
95.00	-.023	-.041	-.103	-.149	-.194	-.306	-.258
GAP		-.722	-.631	-.425	-.472	-.419	

M = 1.03 α = 11.4°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.305	-.382	-.396	-.054	-.620	-.695	-.679
1.25	-.101	-1.004	-.986	-.930	-.730	-.664	-.634
2.50	-.241	-.988	-.945	-.918	-.726	-.647	-.624
5.00	-.365	-1.014	-.900	-.900	-.725	-.623	-.604
7.50	-.413	-.972	-.829	-.881	-.723	-.634	-.600
10.00	-.417	-.925	-.788	-.861	-.723	-.635	-.593
15.00	-.421	-.846	-.742	-.806	-.725	-.635	-.577
20.00	-.388	-.804	-.681	-.750	-.728	-.630	-.562
25.00	-.372	-.743	-.607	-.728	-.725	-.620	-.546
30.00	-.364	-.648	-.530	-.695	-.717	-.630	-.532
35.00	-.351	-.511	-.463	-.676	-.704	-.623	-.523
40.00	-.344	-.375	-.411	-.647	-.689	-.615	-.516
45.00	-.358	-.347	-.421	-.618	-.679	-.601	-.509
50.00	-.378	-.050	-.477	-.588	-.664	-.589	-.504
55.00	-.334	-.161	-.488	-.540	-.648	-.567	-.496
60.00	-.172	-.151	-.483	-.416	-.629	-.549	-.488
65.00	-.004	-.077	-.447	-.424	-.588	-.519	-.483
70.00	-.302	-.024	-.415	-.395	-.633	-.495	-.485
75.00	-.917	-.769	-.595	-.581	-.606	-.506	-.476
80.00	-.577	-.771	-.627	-.589	-.644	-.516	-.473
85.00	-.444	-.722	-.599	-.560	-.647	-.518	-.467
90.00	-.476	-.660	-.557	-.532	-.626	-.508	-.463
95.00	-.393	-.584	-.529	-.501	-.589	-.493	-.460

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.469	.674	.616	.597	.556	.539	.465
2.50	.594	.635	.581	.545	.526	.514	.427
5.00	.735	.578	.517	.507	.462	.439	.358
7.50	.651	.526	.472	.458	.414	.390	.290
10.00	.609	.498	.435	.418	.376	.376	.238
15.00	.563	.427	.381	.342	.317	.292	.133
20.00	.479	.377	.325	.296	.263	.236	.018
25.00	.444	.335	.278	.253	.219	.185	-.057
30.00	.395	.296	.237	.217	.181	.144	-.132
35.00	.343	.259	.206	.181	.141	.099	-.183
40.00	.304	.226	.167	.140	.104	.062	-.223
45.00	.279	.185	.139	.104	.067	.004	-.248
50.00	.226	.142	.107	.067	.045	-.058	-.290
55.00	.218	.108	.084	.033	-.007	-.102	-.331
60.00	.174	.039	.058	.016	-.063	-.128	-.291
65.00	.145	.018	.013	-.059	-.071	-.210	-.268
70.00	.068						-.290
75.00	-.148	.286	.213	.189	.114	-.058	-.314
80.00	.161	.158	.088	.021	-.007	-.135	-.331
85.00	.123	.105	.030	-.020	-.058	-.153	-.354
90.00	.075	.062	-.012	-.071	-.113	-.227	-.377
95.00	.056	-.005	-.063	-.122	-.159	-.268	-.405
GAP		-.654	-.656	-.521	-.681	-.473	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.60   α = 0.0°

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.017	-.465	-.434	-.647	-.406	-.399	-.271
	1.25	.106	-.160	-.242	-.300	-.378	-.496	-.456
	2.50	.039	-.123	-.185	-.236	-.284	-.317	-.338
	5.00	-.013	-.113	-.158	-.164	-.231	-.256	-.261
	7.50	-.031	-.126	-.166	-.183	-.225	-.239	-.260
	10.00	-.051	-.133	-.173	-.188	-.219	-.230	-.245
	15.00	-.082	-.153	-.184	-.213	-.206	-.217	-.210
	20.00	-.117	-.166	-.198	-.216	-.219	-.226	-.206
	25.00	-.128	-.182	-.213	-.225	-.225	-.227	-.188
	30.00	-.145	-.190	-.217	-.221	-.225	-.226	-.183
	35.00	-.154	-.202	-.227	-.234	-.231	-.227	-.176
	40.00	-.159	-.217	-.235	-.241	-.234	-.226	-.180
	45.00	-.183	-.232	-.242	-.249	-.243	-.225	-.176
	50.00	-.199	-.247	-.248	-.254	-.241	-.224	-.173
	55.00	-.210	-.247	-.244	-.250	-.241	-.219	-.162
	60.00	-.218	-.254	-.236	-.247	-.233	-.203	-.141
	65.00	-.239	-.269	-.249	-.248	-.221	-.184	-.128
	70.00	-.282	-.750	-.490	-.303	-.269	-.180	-.118
	75.00	-.219	-.003	-.103	-.156	-.138	-.150	-.108
	80.00	-.088	-.057	-.153	-.171	-.158	-.128	-.092
	85.00	-.106	-.080	-.156	-.165	-.159	-.129	-.084
	90.00	-.099	-.090	-.181	-.178	-.166	-.125	-.074
	95.00	-.089	-.115	-.184	-.191	-.172	-.117	-.070
LOWER SURFACE	1.25	.159	-.040	.008	.036	.206	.221	.173
	2.50	.091	-.036	.001	.005	.102	.098	.122
	5.00	.030	-.042	-.015	.029	.084	.103	.052
	7.50	.004	-.056	-.001	.035	.053	.069	.017
	10.00	-.009	-.066	-.032	.011	.034	.055	-.006
	15.00	-.033	-.069	-.040	-.002	.029	.026	-.023
	20.00	-.047	-.070	-.033	.000	.025	.028	-.041
	25.00	-.062	-.068	-.023	.010	.030	.031	-.034
	30.00	-.074	-.060	-.013	.019	.039	.031	-.033
	35.00	-.067	-.038	.013	.039	.057	.041	-.032
	40.00	-.067	-.008	.044	.061	.086	.061	-.034
	45.00	-.062	.056	.086	.099	.122	.088	-.033
	50.00	-.051	.118	.141	.151	.176	.133	-.037
	55.00	.004	.234	.235	.227	.253	.196	-.044
	60.00	.096	.291	.309	.312	.321	.253	-.032
	65.00	.296	.278	.302	.308	.320	.233	-.035
	70.00	.503						-.038
	75.00	-1.095	-.672	-.340	-.295	-.229	-.164	-.047
	80.00	-.523	-.735	-.351	-.296	-.235	-.157	-.059
	85.00	-.328	-.704	-.367	-.304	-.235	-.147	-.079
	90.00	-.281	-.623	-.384	-.314	-.239	-.136	-.090
	95.00	-.118	-.510	-.374	-.322	-.246	-.133	-.085
	GAP		.229	.315	.320	.332	.222	

M = 0.60   α = 3.8°

	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	-.021	-.200	-.483	-.224	-.454	-.354	-.577
	1.25	-.157	-1.054	-1.383	-1.274	-.995	-.931	-.975
	2.50	-.231	-.581	-.734	-.878	-.856	-.803	-.825
	5.00	-.256	-.436	-.547	-.610	-.753	-.742	-.696
	7.50	-.242	-.385	-.484	-.533	-.673	-.674	-.618
	10.00	-.257	-.354	-.443	-.490	-.611	-.583	-.541
	15.00	-.252	-.340	-.406	-.453	-.510	-.534	-.407
	20.00	-.274	-.323	-.382	-.405	-.457	-.467	-.358
	25.00	-.275	-.320	-.368	-.388	-.424	-.421	-.310
	30.00	-.282	-.315	-.352	-.356	-.389	-.379	-.278
	35.00	-.271	-.317	-.345	-.349	-.367	-.344	-.259
	40.00	-.268	-.315	-.337	-.336	-.345	-.322	-.258
	45.00	-.279	-.326	-.330	-.332	-.337	-.295	-.245
	50.00	-.291	-.330	-.320	-.319	-.315	-.280	-.237
	55.00	-.295	-.320	-.304	-.303	-.301	-.257	-.223
	60.00	-.297	-.317	-.279	-.286	-.276	-.233	-.204
	65.00	-.309	-.323	-.273	-.266	-.247	-.206	-.192
	70.00	-.333	-.635	-.361	-.252	-.248	-.177	-.195
	75.00	-.271	-.031	-.152	-.224	-.202	-.200	-.178
	80.00	-.132	-.073	-.174	-.196	-.196	-.166	-.164
	85.00	-.138	-.072	-.170	-.182	-.182	-.160	-.167
	90.00	-.116	-.078	-.180	-.180	-.175	-.142	-.160
	95.00	-.100	-.078	-.178	-.179	-.171	-.132	-.150
LOWER SURFACE	1.25	.309	.373	.408	.465	.466	.479	.398
	2.50	.283	.294	.332	.361	.384	.355	.341
	5.00	.245	.216	.255	.260	.319	.311	.239
	7.50	.204	.169	.236	.213	.265	.258	.168
	10.00	.178	.139	.179	.206	.226	.224	.124
	15.00	.137	.107	.146	.173	.194	.166	.066
	20.00	.107	.085	.126	.149	.166	.145	.017
	25.00	.079	.067	.112	.136	.150	.127	.002
	30.00	.057	.064	.100	.127	.143	.113	-.010
	35.00	.053	.070	.111	.133	.143	.105	-.027
	40.00	.044	.083	.124	.142	.147	.107	-.036
	45.00	.037	.121	.153	.164	.173	.123	-.047
	50.00	.045	.173	.192	.202	.211	.152	-.054
	55.00	.069	.267	.266	.265	.268	.200	-.061
	60.00	.165	.321	.310	.332	.316	.230	-.057
	65.00	.367	.296	.311	.322	.313	.209	-.060
	70.00	.579						-.073
	75.00	-1.002	-.586	-.287	-.251	-.209	-.143	-.081
	80.00	-.465	-.671	-.295	-.259	-.214	-.136	-.094
	85.00	-.220	-.638	-.310	-.269	-.213	-.128	-.107
	90.00	-.142	-.544	-.332	-.281	-.221	-.120	-.109
	95.00	-.047	-.414	-.327	-.286	-.222	-.129	-.106
	GAP		.255	.315	.330	.317	.195	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.60 α = 6.0°							
UPPER SURFACE							
.00	-.008	-.677	-.782	-.431	-.830	-.741	-.770
1.25	-.397	-1.146	-.945	-.970	-.981	-1.003	-.912
2.50	-.468	-1.043	-.914	-.947	-.965	-.962	-.892
5.00	-.457	-.878	-.877	-.917	-.928	-.954	-.851
7.50	-.410	-.757	-.827	-.884	-.890	-.915	-.838
10.00	-.426	-.672	-.776	-.842	-.847	-.891	-.806
15.00	-.394	-.569	-.683	-.728	-.744	-.824	-.729
20.00	-.407	-.499	-.604	-.637	-.663	-.779	-.666
25.00	-.403	-.456	-.558	-.565	-.598	-.723	-.589
30.00	-.397	-.430	-.511	-.507	-.547	-.645	-.531
35.00	-.370	-.418	-.472	-.468	-.497	-.558	-.482
40.00	-.359	-.403	-.442	-.427	-.451	-.475	-.457
45.00	-.362	-.403	-.414	-.396	-.414	-.396	-.425
50.00	-.374	-.397	-.386	-.367	-.374	-.340	-.403
55.00	-.365	-.380	-.358	-.341	-.341	-.299	-.388
60.00	-.361	-.368	-.323	-.318	-.308	-.262	-.366
65.00	-.370	-.359	-.306	-.289	-.269	-.227	-.359
70.00	-.377	-.619	-.352	-.257	-.260	-.185	-.354
75.00	-.314	-.101	-.205	-.262	-.230	-.219	-.339
80.00	-.171	-.111	-.205	-.225	-.213	-.177	-.327
85.00	-.167	-.101	-.189	-.199	-.201	-.169	-.324
90.00	-.137	-.083	-.188	-.185	-.198	-.146	-.294
95.00	-.105	-.071	-.163	-.168	-.169	-.129	-.257
LOWER SURFACE							
1.25	.345	.462	.461	.512	.483	.490	.419
2.50	.353	.408	.422	.428	.450	.426	.395
5.00	.348	.328	.351	.351	.402	.390	.307
7.50	.313	.275	.339	.310	.342	.341	.229
10.00	.285	.240	.269	.290	.306	.305	.179
15.00	.235	.196	.228	.246	.258	.235	.119
20.00	.198	.160	.196	.214	.224	.204	.050
25.00	.161	.136	.177	.197	.203	.176	.018
30.00	.130	.124	.158	.183	.187	.156	.000
35.00	.121	.124	.161	.180	.184	.144	-.017
40.00	.107	.131	.166	.182	.187	.141	-.028
45.00	.092	.158	.186	.200	.199	.146	-.040
50.00	.098	.210	.218	.229	.229	.164	-.049
55.00	.114	.285	.289	.282	.283	.206	-.060
60.00	.200	.344	.332	.355	.333	.241	-.057
65.00	.397	.324	.334	.349	.339	.223	-.062
70.00	.636						-.072
75.00	-.997	-.568	-.282	-.243	-.206	-.125	-.081
80.00	-.429	-.684	-.292	-.252	-.211	-.119	-.095
85.00	-.181	-.639	-.307	-.264	-.218	-.115	-.106
90.00	-.099	-.527	-.323	-.279	-.224	-.119	-.106
95.00	-.005	-.367	-.308	-.266	-.219	-.131	-.112
GAP		.283	.337	.355	.336	.204	
M = 0.60 α = 8.1°							
UPPER SURFACE							
.00	-.002	-.990	-1.143	-.910	-1.024	-.692	-.548
1.25	-.646	-1.162	-1.038	-1.306	-.984	-.802	-.579
2.50	-.703	-1.124	-1.022	-1.300	-.993	-.771	-.569
5.00	-.665	-1.063	-1.006	-1.284	-.986	-.785	-.541
7.50	-.589	-.998	-.972	-1.283	-.970	-.775	-.547
10.00	-.605	-.981	-.933	-1.300	-.958	-.774	-.535
15.00	-.529	-.912	-.861	-1.278	-.925	-.743	-.515
20.00	-.514	-.755	-.791	-1.234	-.902	-.713	-.476
25.00	-.501	-.633	-.748	-1.114	-.879	-.687	-.445
30.00	-.488	-.541	-.682	-.897	-.847	-.666	-.423
35.00	-.452	-.487	-.610	-.675	-.808	-.640	-.403
40.00	-.429	-.455	-.548	-.471	-.763	-.610	-.391
45.00	-.423	-.443	-.488	-.336	-.711	-.570	-.361
50.00	-.426	-.433	-.431	-.261	-.645	-.534	-.344
55.00	-.412	-.410	-.387	-.232	-.585	-.495	-.332
60.00	-.399	-.386	-.338	-.213	-.515	-.460	-.317
65.00	-.404	-.367	-.311	-.206	-.436	-.409	-.313
70.00	-.409	-.600	-.351	-.230	-.358	-.372	-.311
75.00	-.343	-.152	-.221	-.161	-.344	-.356	-.287
80.00	-.200	-.137	-.209	-.138	-.314	-.345	-.283
85.00	-.189	-.121	-.181	-.125	-.278	-.330	-.279
90.00	-.151	-.081	-.177	-.126	-.258	-.286	-.259
95.00	-.101	-.050	-.145	-.129	-.199	-.263	-.251
LOWER SURFACE							
1.25	.349	.488	.471	.520	.490	.487	.422
2.50	.384	.469	.467	.482	.489	.445	.408
5.00	.435	.399	.410	.417	.452	.417	.325
7.50	.404	.353	.407	.373	.399	.371	.245
10.00	.380	.313	.335	.352	.362	.333	.205
15.00	.326	.264	.293	.304	.308	.266	.141
20.00	.280	.224	.254	.272	.270	.231	.073
25.00	.237	.196	.230	.246	.242	.204	.039
30.00	.199	.180	.207	.227	.234	.174	.018
35.00	.185	.173	.204	.219	.212	.155	-.002
40.00	.165	.176	.205	.217	.212	.145	-.019
45.00	.147	.196	.220	.228	.219	.147	-.027
50.00	.148	.235	.246	.252	.243	.166	-.038
55.00	.154	.308	.302	.299	.287	.203	-.055
60.00	.235	.367	.355	.372	.338	.244	-.052
65.00	.426	.350	.360	.367	.344	.229	-.064
70.00	.673						-.087
75.00	-1.003	-.555	-.278	-.247	-.251	-.178	-.094
80.00	-.355	-.707	-.288	-.253	-.256	-.163	-.113
85.00	-.159	-.644	-.302	-.266	-.265	-.179	-.127
90.00	-.061	-.502	-.319	-.282	-.272	-.200	-.134
95.00	.046	-.303	-.295	-.268	-.266	-.224	-.148
GAP		.311	.362	.369	.345	.211	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

PRESSURE COEFFICIENT, P, AT:

M = 0.60   α = 12.1°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.004	-1.854	-1.556	-1.046	-.775	-.488	-.411
1.25	-1.253	-1.714	-1.175	-.911	-.626	-.442	-.356
2.50	-1.377	-1.759	-1.190	-.911	-.624	-.420	-.349
5.00	-1.241	-1.842	-1.221	-.907	-.618	-.432	-.334
7.50	-1.059	-1.968	-1.238	-.907	-.611	-.429	-.342
10.00	-1.053	-2.120	-1.260	-.908	-.608	-.427	-.342
15.00	-.825	-2.115	-1.304	-.890	-.592	-.415	-.338
20.00	-.752	-1.815	-1.375	-.878	-.576	-.404	-.337
25.00	-.691	-.963	-1.394	-.861	-.566	-.393	-.317
30.00	-.644	-.347	-1.351	-.858	-.556	-.389	-.313
35.00	-.577	-.309	-1.303	-.857	-.541	-.382	-.304
40.00	-.538	-.340	-1.216	-.840	-.530	-.375	-.304
45.00	-.516	-.381	-1.111	-.827	-.521	-.361	-.284
50.00	-.500	-.403	-.984	-.803	-.517	-.362	-.274
55.00	-.475	-.401	-.836	-.782	-.514	-.352	-.266
60.00	-.451	-.388	-.691	-.747	-.509	-.348	-.255
65.00	-.443	-.369	-.545	-.718	-.492	-.338	-.251
70.00	-.427	-.532	-.454	-.712	-.529	-.333	-.251
75.00	-.357	-.125	-.270	-.614	-.489	-.319	-.238
80.00	-.226	-.117	-.225	-.638	-.485	-.301	-.235
85.00	-.192	-.087	-.168	-.586	-.485	-.295	-.234
90.00	-.149	-.046	-.143	-.559	-.499	-.287	-.222
95.00	-.114	-.011	-.109	-.518	-.512	-.278	-.212

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.280	.467	.438	.503	.473	.471	.408
2.50	.375	.542	.519	.509	.504	.444	.405
5.00	.549	.515	.502	.479	.483	.429	.336
7.50	.556	.478	.513	.433	.435	.384	.274
10.00	.539	.439	.437	.419	.396	.346	.223
15.00	.481	.386	.386	.366	.342	.278	.158
20.00	.422	.340	.343	.327	.292	.239	.084
25.00	.367	.307	.309	.295	.260	.201	.045
30.00	.322	.281	.281	.267	.229	.161	.014
35.00	.298	.268	.267	.246	.205	.137	.001
40.00	.273	.260	.257	.230	.191	.120	-.038
45.00	.247	.272	.260	.231	.187	.117	-.065
50.00	.244	.292	.276	.239	.196	.125	-.092
55.00	.238	.351	.322	.270	.230	.162	-.124
60.00	.304	.412	.371	.350	.298	.213	-.127
65.00	.484	.393	.373	.351	.318	.199	-.144
70.00	.697						-.146
75.00	-1.050	-.556	-.366	-.497	-.654	-.385	-.156
80.00	-.203	-.787	-.390	-.577	-.694	-.358	-.152
85.00	-.059	-.673	-.392	-.646	-.728	-.329	-.152
90.00	.110	-.406	-.392	-.616	-.737	-.307	-.157
95.00	.123	-.095	-.349	-.501	-.718	-.291	-.170
GAP		.359	.374	.352	.314	.167	

M = 0.85   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.022	.509	.480	.715	.460	.453	.307
1.25	-.169	-.093	-.147	-.223	-.311	-.426	.458
2.50	-.104	-.074	-.119	-.188	-.244	-.299	-.370
5.00	-.035	-.074	-.113	-.126	-.213	-.251	-.284
7.50	-.012	-.092	-.131	-.156	-.218	-.244	-.308
10.00	-.007	-.101	-.142	-.170	-.224	-.238	-.308
15.00	-.041	-.133	-.167	-.215	-.215	-.260	-.253
20.00	-.092	-.151	-.190	-.216	-.237	-.275	-.248
25.00	-.114	-.174	-.217	-.237	-.256	-.271	-.227
30.00	-.128	-.191	-.229	-.229	-.255	-.279	-.218
35.00	-.143	-.207	-.245	-.244	-.267	-.276	-.203
40.00	-.151	-.225	-.262	-.257	-.278	-.270	-.210
45.00	-.178	-.256	-.269	-.272	-.291	-.264	-.212
50.00	-.195	-.285	-.272	-.278	-.291	-.253	-.202
55.00	-.221	-.299	-.267	-.276	-.292	-.233	-.188
60.00	-.239	-.329	-.259	-.271	-.276	-.198	-.164
65.00	-.259	-.318	-.254	-.266	-.252	-.197	-.139
70.00	-.320	-.732	-.489	-.303	-.278	-.162	-.137
75.00	-.332	-.023	-.105	-.193	-.187	-.143	-.120
80.00	-.146	-.083	-.166	-.201	-.193	-.137	-.099
85.00	-.153	-.103	-.175	-.190	-.187	-.128	-.096
90.00	-.144	-.119	-.205	-.203	-.190	-.127	-.081
95.00	-.150	-.152	-.208	-.207	-.193	-.127	-.081

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.203	-.067	-.044	-.007	.164	.073	.153
2.50	.130	-.054	-.035	-.011	.064	.097	-.106
5.00	.062	-.055	-.035	-.041	.060	.066	-.036
7.50	.024	-.066	-.028	-.043	.015	.053	-.001
10.00	.007	-.072	-.041	-.022	.012	.021	-.026
15.00	-.027	-.082	-.043	-.010	.014	.027	-.051
20.00	-.045	-.087	-.029	-.002	-.028	-.028	-.063
25.00	-.067	-.084	-.017	-.007	-.041	-.032	-.047
30.00	-.083	-.072	-.005	-.021	-.059	-.043	-.040
35.00	-.079	-.046	.022	-.042	-.089	-.063	-.036
40.00	-.081	-.000	.054	-.070	-.132	-.097	-.039
45.00	-.076	.072	.101	-.114	-.192	-.150	-.049
50.00	-.058	.167	.168	-.176	-.270	-.223	-.058
55.00	-.010	.271	.254	-.255	-.315	-.252	-.068
60.00	-.136	.264	.292	-.330	-.304	-.218	-.055
65.00	-.333	.243	.283	-.315			-.054
70.00	-.533						-.070
75.00	-.998	-.684	-.364	-.298	-.251	-.182	-.072
80.00	-.543	-.705	-.368	-.298	-.249	-.174	-.085
85.00	-.378	-.674	-.377	-.301	-.249	-.164	-.100
90.00	-.280	-.617	-.388	-.305	-.246	-.154	-.109
95.00	-.191	-.536	-.383	-.310	-.319	-.150	-.108
GAP		.195	.305	.333	.319	.217	

TABLE IV — WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.85   α = 4.0°

Surface	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER	.00	.027	-.123	-.017	.231	-.117	-.129	-.381
	1.25	-.051	-.917	-1.124	-1.284	-1.245	-1.326	-1.253
	2.50	-.156	-.731	-.980	-1.126	-1.192	-1.216	-1.202
	5.00	-.207	-.451	-.628	-.803	-1.029	-1.163	-1.048
	7.50	-.203	-.405	-.537	-.686	-.899	-1.073	-.981
	10.00	-.236	-.379	-.487	-.624	-.805	-.877	-.902
	15.00	-.243	-.362	-.462	-.561	-.643	-.706	-.697
	20.00	-.281	-.355	-.455	-.527	-.558	-.582	-.569
	25.00	-.226	-.358	-.449	-.510	-.508	-.490	-.455
	30.00	-.308	-.365	-.447	-.479	-.468	-.426	-.358
	35.00	-.296	-.376	-.447	-.451	-.447	-.389	-.304
	40.00	-.298	-.384	-.467	-.415	-.432	-.354	-.294
	45.00	-.323	-.414	-.480	-.398	-.418	-.321	-.282
	50.00	-.347	-.432	-.460	-.381	-.388	-.296	-.280
	55.00	-.360	-.436	-.384	-.360	-.362	-.272	-.270
	60.00	-.373	-.475	-.327	-.334	-.324	-.248	-.261
	65.00	-.392	-.522	-.305	-.306	-.277	-.218	-.250
	70.00	-.424	-.681	-.382	-.270	-.249	-.185	-.253
	75.00	-.476	-.084	-.170	-.296	-.265	-.234	-.249
	80.00	-.282	-.117	-.202	-.258	-.239	-.188	-.241
	85.00	-.238	-.025	-.206	-.226	-.217	-.184	-.243
	90.00	-.184	-.098	-.219	-.216	-.161	-.162	-.241
	95.00	-.124	-.106	-.216	-.211	-.202	-.150	-.222
LOWER	1.25	.341	.375	.404	.470	.478	.505	.411
	2.50	.327	.299	.331	.345	.389	.371	.358
	5.00	.282	.225	.258	.261	.320	.329	.261
	7.50	.240	.179	.227	.205	.267	.275	.192
	10.00	.215	.148	.190	.212	.233	.243	.139
	15.00	.165	.114	.159	.179	.199	.186	.071
	20.00	.133	.089	.137	.160	.171	.165	-.003
	25.00	.098	.073	.125	.146	.156	.144	-.027
	30.00	.073	.071	.117	.142	.150	.124	-.038
	35.00	.065	.081	.127	.147	.149	.117	-.047
	40.00	.055	.106	.143	.158	.162	.117	-.054
	45.00	.047	.154	.171	.185	.187	.130	-.069
	50.00	.059	.225	.222	.230	.238	.161	-.080
	55.00	.091	.313	.295	.291	.287	.212	-.089
	60.00	.211	.321	.331	.355	.324	.233	-.080
	65.00	.420	.281	.326	.341	.320	.211	-.085
	70.00	.650						-.095
	75.00	-.960	-.619	-.319	-.263	-.228	-.160	-.100
	80.00	-.508	-.676	-.325	-.268	-.232	-.152	-.115
	85.00	-.275	-.636	-.332	-.276	-.236	-.147	-.120
	90.00	-.201	-.562	-.344	-.284	-.241	-.147	-.119
	95.00	-.110	-.452	-.339	-.283	-.243	-.151	-.121
	GAP		.238	.333	.347	.327	.197	

M = 0.85   α = 6.0°

Surface	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER	.00	.013	-.114	-.237	.015	-.378	-.324	-.466
	1.25	-.184	-1.148	-1.304	-1.331	-1.397	-1.100	-.832
	2.50	-.308	-1.114	-1.201	-1.221	-1.380	-1.020	-.819
	5.00	-.351	-.911	-.951	-1.048	-1.309	-1.029	-.764
	7.50	-.338	-.758	-.821	-.961	-1.245	-1.001	-.761
	10.00	-.384	-.570	-.738	-.903	-1.195	-.958	-.736
	15.00	-.360	-.465	-.658	-.824	-1.055	-.885	-.679
	20.00	-.391	-.448	-.595	-.760	-.945	-.826	-.633
	25.00	-.406	-.450	-.576	-.716	-.878	-.801	-.581
	30.00	-.411	-.455	-.562	-.641	-.746	-.736	-.526
	35.00	-.388	-.464	-.561	-.585	-.637	-.687	-.464
	40.00	-.381	-.475	-.569	-.513	-.531	-.642	-.448
	45.00	-.409	-.498	-.573	-.453	-.456	-.589	-.431
	50.00	-.427	-.516	-.558	-.408	-.388	-.543	-.415
	55.00	-.446	-.519	-.472	-.375	-.341	-.498	-.396
	60.00	-.461	-.545	-.372	-.347	-.308	-.447	-.390
	65.00	-.469	-.590	-.328	-.315	-.269	-.379	-.367
	70.00	-.497	-.692	-.377	-.277	-.260	-.356	-.366
	75.00	-.563	-.154	-.210	-.301	-.246	-.347	-.351
	80.00	-.370	-.141	-.218	-.270	-.227	-.326	-.328
	85.00	-.306	-.118	-.218	-.240	-.209	-.296	-.327
	90.00	-.221	-.087	-.226	-.226	-.203	-.240	-.309
	95.00	-.140	-.074	-.217	-.210	-.196	-.220	-.286
LOWER	1.25	.373	.464	.471	.463	.517	.524	.427
	2.50	.396	.395	.412	.410	.449	.416	.395
	5.00	.375	.313	.335	.334	.398	.387	.303
	7.50	.331	.262	.301	.285	.337	.336	.240
	10.00	.303	.232	.260	.281	.302	.298	.180
	15.00	.244	.185	.223	.239	.253	.235	.112
	20.00	.203	.154	.192	.214	.222	.206	.027
	25.00	.164	.131	.175	.194	.202	.180	-.007
	30.00	.133	.123	.162	.182	.191	.155	-.031
	35.00	.123	.128	.166	.182	.186	.144	-.045
	40.00	.104	.145	.174	.189	.193	.138	-.054
	45.00	.092	.183	.199	.210	.209	.145	-.069
	50.00	.103	.243	.241	.246	.242	.166	-.078
	55.00	.123	.326	.310	.303	.298	.210	-.086
	60.00	.238	.342	.349	.371	.339	.238	-.080
	65.00	.447	.300	.346	.359	.340	.220	-.088
	70.00	.703						-.106
	75.00	-.962	-.610	-.318	-.265	-.233	-.174	-.111
	80.00	-.492	-.697	-.324	-.271	-.238	-.158	-.131
	85.00	-.234	-.655	-.331	-.279	-.250	-.162	-.139
	90.00	-.170	-.560	-.340	-.289	-.257	-.172	-.145
	95.00	-.090	-.416	-.330	-.284	-.255	-.189	-.163
	GAP		.256	.353	.364	.343	.202	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.85 α = 8.0°							
UPPER SURFACE							
.00	.012	-.324	-.433	-.188	-.595	-.402	-.434
1.25	-.303	-1.218	-1.324	-1.464	-1.177	-.731	-.544
2.50	-.449	-1.153	-1.204	-1.423	-1.168	-.680	-.537
5.00	-.495	-1.035	-1.081	-1.312	-1.138	-.699	-.510
7.50	-.484	-.969	-1.022	-1.234	-1.110	-.697	-.522
10.00	-.528	-.912	-.985	-1.181	-1.091	-.690	-.518
15.00	-.486	-.825	-.931	-1.096	-1.039	-.660	-.516
20.00	-.495	-.714	-.860	-1.027	-1.002	-.631	-.493
25.00	-.495	-.634	-.825	-.973	-.966	-.597	-.464
30.00	-.491	-.573	-.771	-.865	-.908	-.584	-.458
35.00	-.454	-.552	-.739	-.784	-.861	-.567	-.438
40.00	-.460	-.547	-.714	-.692	-.806	-.543	-.433
45.00	-.484	-.562	-.677	-.609	-.753	-.516	-.407
50.00	-.504	-.580	-.612	-.525	-.702	-.500	-.390
55.00	-.519	-.586	-.508	-.457	-.655	-.479	-.375
60.00	-.532	-.606	-.415	-.397	-.601	-.464	-.354
65.00	-.532	-.644	-.354	-.334	-.500	-.446	-.340
70.00	-.556	-.688	-.361	-.284	-.531	-.433	-.329
75.00	-.626	-.225	-.256	-.300	-.459	-.385	-.304
80.00	-.450	-.146	-.244	-.267	-.432	-.384	-.302
85.00	-.360	-.104	-.230	-.229	-.395	-.373	-.302
90.00	-.232	-.066	-.226	-.216	-.364	-.349	-.283
95.00	-.128	-.024	-.201	-.203	-.310	-.342	-.274
LOWER SURFACE							
1.25	.391	.528	.513	.465	.528	.523	.439
2.50	.456	.476	.473	.450	.490	.447	.420
5.00	.470	.399	.407	.396	.447	.424	.332
7.50	.432	.349	.370	.360	.390	.374	.279
10.00	.401	.312	.328	.342	.357	.339	.213
15.00	.339	.263	.288	.296	.301	.271	.143
20.00	.291	.229	.250	.266	.270	.239	.054
25.00	.246	.202	.229	.244	.245	.205	.013
30.00	.209	.187	.209	.227	.225	.178	-.017
35.00	.193	.186	.207	.222	.214	.156	-.041
40.00	.174	.196	.211	.221	.216	.143	-.059
45.00	.154	.225	.230	.235	.226	.144	-.081
50.00	.160	.273	.264	.265	.252	.160	-.100
55.00	.172	.348	.328	.317	.301	.199	-.117
60.00	.276	.373	.370	.388	.348	.232	-.117
65.00	.483	.330	.368	.377	.349	.216	-.139
70.00	.741						-.148
75.00	-.958	-.593	-.319	-.275	-.324	-.269	-.157
80.00	-.421	-.720	-.328	-.292	-.331	-.257	-.172
85.00	-.188	-.664	-.336	-.308	-.353	-.273	-.183
90.00	-.107	-.538	-.346	-.317	-.362	-.296	-.189
95.00	-.036	-.324	-.322	-.297	-.345	-.322	-.197
GAP		.291	.373	.380	.350	.196	
M = 0.85 α = 12.1°							
UPPER SURFACE							
.00	.002	-.752	-.838	-.515	-.729	-.456	-.372
1.25	-.539	-1.461	-1.165	-.843	-.715	-.487	-.341
2.50	-.730	-1.454	-1.118	-.835	-.702	-.458	-.335
5.00	-.799	-1.424	-1.103	-.826	-.695	-.475	-.315
7.50	-.794	-1.419	-1.083	-.832	-.686	-.474	-.324
10.00	-.828	-1.390	-1.063	-.835	-.681	-.473	-.321
15.00	-.783	-1.375	-1.039	-.825	-.663	-.452	-.317
20.00	-.752	-1.355	-1.029	-.814	-.646	-.434	-.303
25.00	-.726	-1.357	-1.036	-.789	-.627	-.420	-.281
30.00	-.693	-1.158	-.990	-.774	-.620	-.412	-.280
35.00	-.644	-.527	-.969	-.767	-.606	-.408	-.283
40.00	-.627	-.395	-.945	-.745	-.595	-.401	-.276
45.00	-.636	-.386	-.918	-.728	-.587	-.391	-.260
50.00	-.635	-.409	-.889	-.710	-.576	-.391	-.258
55.00	-.619	-.466	-.850	-.690	-.564	-.386	-.260
60.00	-.561	-.553	-.825	-.665	-.554	-.385	-.259
65.00	-.510	-.633	-.767	-.630	-.521	-.388	-.267
70.00	-.497	-.737	-.740	-.620	-.529	-.385	-.266
75.00	-.557	-.408	-.709	-.585	-.513	-.360	-.263
80.00	-.444	-.298	-.675	-.603	-.501	-.338	-.269
85.00	-.425	-.247	-.621	-.573	-.486	-.338	-.273
90.00	-.336	-.188	-.558	-.563	-.483	-.340	-.269
95.00	-.233	-.098	-.470	-.554	-.457	-.325	-.270
LOWER SURFACE							
1.25	.351	.574	.526	.495	.509	.504	.441
2.50	.507	.576	.543	.499	.512	.464	.442
5.00	.620	.523	.503	.471	.484	.453	.371
7.50	.595	.479	.477	.429	.435	.408	.314
10.00	.571	.438	.432	.417	.401	.371	.259
15.00	.498	.388	.383	.364	.343	.302	.190
20.00	.434	.343	.340	.325	.297	.266	.104
25.00	.379	.309	.310	.294	.265	.230	.056
30.00	.332	.288	.281	.266	.237	.192	.022
35.00	.313	.277	.265	.246	.214	.166	-.008
40.00	.282	.275	.254	.232	.204	.148	-.036
45.00	.257	.289	.259	.233	.203	.142	-.077
50.00	.253	.324	.276	.249	.221	.154	-.119
55.00	.254	.380	.322	.289	.263	.194	-.162
60.00	.339	.412	.374	.373	.328	.242	-.170
65.00	.534	.374	.378	.369	.342	.221	-.188
70.00	.777						-.191
75.00	-1.103	-.702	-.624	-.613	-.636	-.390	-.191
80.00	-.281	-1.023	-.639	-.679	-.635	-.381	-.183
85.00	-.212	-.857	-.634	-.705	-.635	-.368	-.187
90.00	-.029	-.336	-.603	-.693	-.625	-.350	-.201
95.00	.069	.058	-.536	-.627	-.603	-.333	-.222
GAP		.333	.381	.371	.342	.192	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.90   α = 0.1°

PERCENT CHORD	\	PRESSURE COEFFICIENT, P, AT:					
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.034	-.526	-.486	-.730	-.464	-.460	-.320
1.25	-.195	-.075	-.128	-.202	-.323	-.422	-.480
2.50	-.132	-.053	-.103	-.175	-.254	-.314	-.389
5.00	-.064	-.054	-.102	-.117	-.225	-.257	-.291
7.50	-.038	-.070	-.121	-.150	-.232	-.260	-.326
10.00	-.017	-.086	-.131	-.167	-.239	-.260	-.330
15.00	-.022	-.117	-.158	-.217	-.222	-.254	-.350
20.00	-.075	-.132	-.184	-.232	-.242	-.279	-.303
25.00	-.093	-.155	-.216	-.261	-.265	-.303	-.258
30.00	-.111	-.174	-.230	-.260	-.268	-.310	-.239
35.00	-.122	-.194	-.255	-.269	-.287	-.323	-.222
40.00	-.134	-.212	-.284	-.260	-.298	-.332	-.233
45.00	-.163	-.245	-.319	-.264	-.316	-.337	-.227
50.00	-.183	-.271	-.354	-.276	-.327	-.306	-.215
55.00	-.208	-.287	-.334	-.288	-.327	-.259	-.201
60.00	-.226	-.328	-.257	-.277	-.313	-.239	-.175
65.00	-.244	-.398	-.244	-.284	-.277	-.210	-.148
70.00	-.295	-.756	-.520	-.315	-.283	-.205	-.145
75.00	-.378	-.046	-.085	-.214	-.236	-.182	-.134
80.00	-.206	-.080	-.165	-.230	-.222	-.152	-.106
85.00	-.202	-.095	-.183	-.212	-.208	-.151	-.106
90.00	-.166	-.108	-.220	-.218	-.207	-.137	-.089
95.00	-.162	-.142	-.230	-.221	-.199	-.136	-.090
LOWER SURFACE							
1.25	.230	-.046	-.046	-.009	.163	.212	.157
2.50	.160	-.033	-.034	-.012	.065	.070	.110
5.00	.090	-.037	-.035	-.038	.058	.098	.039
7.50	.051	-.051	-.029	-.042	.030	.065	.004
10.00	.029	-.058	-.038	-.020	.014	.049	-.030
15.00	.006	-.072	-.038	-.008	.013	.018	-.069
20.00	-.030	-.078	-.024	-.001	.013	.024	-.081
25.00	-.053	-.081	-.011	-.009	.029	.025	-.060
30.00	-.070	-.069	-.000	-.023	.041	.025	-.047
35.00	-.069	-.036	.025	.046	.058	.037	-.042
40.00	-.074	-.016	.057	.074	.089	.058	-.042
45.00	-.071	.097	.104	.120	.130	.094	-.054
50.00	-.051	.194	.172	.181	.193	.148	-.069
55.00	-.025	.288	.257	.263	.273	.218	-.082
60.00	.163	.271	.293	.337	.315	.242	-.066
65.00	.355	.236	.289	.324	.304	.213	-.066
70.00	.552						-.075
75.00	.998	.688	.377	.304	.261	.193	-.082
80.00	.512	.705	.382	.305	.262	.184	-.096
85.00	.378	.676	.391	.305	.259	.174	-.110
90.00	.307	.622	.401	.309	.262	.168	-.115
95.00	.195	.539	.395	.314	.260	.164	-.115
GAP		.193	.312	.341	.318	.210	

M = 0.90   α = 4.0°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.028	.214	.090	-.341	.004	-.022	-.280
1.25	.002	-.806	-.981	-1.151	-1.221	-1.281	-1.299
2.50	-.102	-.708	-.910	-1.121	-1.209	-1.217	-1.280
5.00	-.163	-.403	-.566	-.954	-1.077	-1.189	-1.162
7.50	-.166	-.351	-.475	-.665	-1.016	-1.100	-1.146
10.00	-.200	-.320	-.441	-.494	-.961	-1.048	-1.089
15.00	-.210	-.338	-.418	-.481	-.625	-.980	-.918
20.00	-.258	-.327	-.414	-.489	-.526	-.849	-.648
25.00	-.274	-.327	-.424	-.495	-.560	-.657	-.502
30.00	-.277	-.331	-.431	-.490	-.570	-.595	-.336
35.00	-.273	-.349	-.442	-.511	-.580	-.579	-.223
40.00	-.283	-.365	-.455	-.530	-.592	-.490	-.196
45.00	-.298	-.391	-.483	-.558	-.614	-.295	-.184
50.00	-.324	-.414	-.508	-.583	-.551	-.181	-.215
55.00	-.344	-.422	-.525	-.584	-.401	-.158	-.235
60.00	-.363	-.447	-.554	-.451	-.333	-.169	-.235
65.00	-.375	-.502	-.517	-.322	-.288	-.177	-.230
70.00	-.403	-.739	-.375	-.272	-.248	-.190	-.232
75.00	-.514	-.325	-.292	-.311	-.253	-.163	-.235
80.00	-.353	-.338	-.256	-.273	-.311	-.147	-.227
85.00	-.378	-.224	-.243	-.241	-.183	-.153	-.222
90.00	-.366	-.150	-.249	-.229	-.183	-.157	-.218
95.00	-.266	-.139	-.247	-.219	-.182	-.154	-.205
LOWER SURFACE							
1.25	.355	.370	.388	.459	.466	.490	.405
2.50	.340	.295	.316	.322	.369	.355	.348
5.00	.294	.224	.243	.236	.304	.315	.252
7.50	.246	.181	.213	.184	.253	.262	.188
10.00	.220	.147	.180	.194	.223	.231	.131
15.00	.170	.115	.147	.163	.189	.176	.059
20.00	.135	.088	.128	.145	.162	.156	-.034
25.00	.103	.072	.117	.134	.147	.135	-.073
30.00	.075	.071	.110	.129	.143	.116	-.089
35.00	.066	.082	.117	.136	.144	.109	-.096
40.00	.055	.112	.133	.150	.160	.109	-.092
45.00	.046	.165	.163	.179	.184	.121	-.091
50.00	.059	.239	.212	.227	.229	.153	-.092
55.00	.094	.325	.287	.291	.288	.201	-.099
60.00	.225	.317	.323	.353	.323	.220	-.092
65.00	.433	.263	.320	.337	.318	.193	-.097
70.00	.667						-.109
75.00	.985	.657	.352	.276	.236	.173	-.116
80.00	.471	.695	.354	.279	.236	.168	-.127
85.00	.295	.663	.358	.284	.244	.162	-.127
90.00	.199	.578	.369	.290	.260	.159	-.124
95.00	.145	.463	.355	.287	.253	.162	-.126
GAP		.218	.332	.346	.324	.179	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.90   α = 6.0° — UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	-.021	-.014	-.103	-.142	-.214	-.230	-.470
1.25	-.104	-1.062	-1.197	-1.352	-1.391	-1.312	-1.060
2.50	-.232	-1.063	-1.173	-1.335	-1.385	-1.231	-1.052
5.00	-.281	-.841	-.953	-1.241	-1.294	-1.252	-.985
7.50	-.281	-.656	-.788	-1.137	-1.249	-1.201	-.995
10.00	-.329	-.496	-.683	-1.069	-1.218	-1.160	-.965
15.00	-.318	-.419	-.593	-.866	-1.104	-1.104	-.905
20.00	-.343	-.405	-.542	-.658	-1.047	-1.029	-.796
25.00	-.357	-.414	-.534	-.606	-.950	-.971	-.726
30.00	-.360	-.413	-.531	-.575	-.755	-.883	-.638
35.00	-.339	-.426	-.538	-.589	-.701	-.794	-.530
40.00	-.339	-.435	-.550	-.608	-.672	-.717	-.519
45.00	-.366	-.461	-.566	-.633	-.663	-.648	-.498
50.0C	-.388	-.486	-.583	-.656	-.586	-.589	-.478
55.00	-.408	-.489	-.596	-.644	-.419	-.522	-.457
60.00	-.426	-.507	-.602	-.506	-.325	-.445	-.442
65.00	-.433	-.547	-.528	-.359	-.272	-.359	-.406
70.00	-.455	-.746	-.380	-.270	-.248	-.337	-.403
75.00	-.575	-.410	-.420	-.391	-.276	-.292	-.388
80.00	-.410	-.422	-.350	-.303	-.258	-.274	-.363
85.00	-.430	-.252	-.316	-.252	-.230	-.243	-.358
90.00	-.428	-.158	-.295	-.231	-.225	-.191	-.344
95.00	-.329	-.102	-.264	-.221	-.209	-.172	-.318

M = 0.90   α = 6.0° — LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.393	.470	.467	.471	.506	.514	.426
2.50	.416	.399	.404	.391	.433	.402	.395
5.00	.390	.318	.327	.318	.373	.370	.301
7.50	.347	.268	.293	.267	.320	.320	.238
10.00	.320	.238	.253	.266	.282	.284	.178
15.00	.260	.192	.217	.226	.241	.226	.105
20.00	.220	.160	.189	.202	.210	.199	.006
25.00	.177	.139	.171	.184	.194	.176	-.040
30.00	.145	.131	.156	.174	.183	.153	-.066
35.00	.134	.136	.157	.175	.181	.141	-.080
40.00	.118	.158	.167	.181	.191	.136	-.084
45.00	.103	.199	.190	.204	.210	.141	-.092
50.00	.115	.261	.232	.245	.248	.163	-.098
55.00	.136	.342	.303	.306	.302	.210	-.101
60.00	.256	.343	.346	.372	.341	.233	-.093
65.00	.469	.290	.342	.357	.340	.210	-.099
70.00	.729						-.117
75.00	-.996	.678	-.358	-.267	-.231	-.174	-.127
80.00	-.427	.741	-.358	-.273	-.238	-.158	-.142
85.00	-.268	.686	-.363	-.283	-.247	-.161	-.146
90.00	-.188	.586	-.369	-.288	-.254	-.166	-.155
95.00	-.129	.433	-.348	-.274	-.251	-.177	-.171
GAP		.243	.353	.366	.343	.193	

M = 0.90   α = 8.0° — UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.009	-.177	-.277	-.038	-.425	-.352	-.446
1.25	-.212	-1.121	-1.218	-1.444	-1.211	-.864	-.639
2.50	-.357	-1.097	-1.141	-1.434	-1.218	-.791	-.628
5.00	-.412	-.986	-.999	-1.365	-1.181	-.819	-.591
7.50	-.413	-.914	-.909	-1.300	-1.152	-.819	-.609
10.00	-.461	-.861	-.859	-1.238	-1.139	-.812	-.604
15.00	-.437	-.790	-.801	-1.072	-1.083	-.782	-.631
20.00	-.451	-.682	-.737	-.915	-1.050	-.741	-.580
25.00	-.455	-.569	-.714	-.870	-1.002	-.680	-.523
30.00	-.456	-.480	-.680	-.795	-.919	-.664	-.521
35.00	-.426	-.464	-.670	-.762	-.876	-.631	-.497
40.00	-.426	-.468	-.664	-.718	-.833	-.596	-.481
45.00	-.443	-.502	-.663	-.679	-.786	-.565	-.451
50.00	-.460	-.534	-.670	-.627	-.726	-.548	-.431
55.00	-.480	-.542	-.657	-.560	-.660	-.527	-.407
60.00	-.494	-.560	-.608	-.470	-.603	-.505	-.387
65.00	-.500	-.586	-.522	-.379	-.502	-.473	-.377
70.00	-.521	-.766	-.422	-.328	-.624	-.471	-.364
75.00	-.634	-.505	-.434	-.419	-.510	-.387	-.340
80.00	-.477	-.511	-.364	-.350	-.471	-.408	-.340
85.00	-.501	-.291	-.319	-.296	-.436	-.389	-.339
90.00	-.504	-.152	-.288	-.279	-.414	-.355	-.320
95.00	-.388	-.051	-.252	-.257	-.361	-.357	-.313

M = 0.90   α = 8.0° — LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.406	.527	.511	.476	.523	.521	.435
2.50	.468	.474	.464	.441	.472	.432	.415
5.00	.475	.396	.394	.376	.426	.409	.331
7.50	.434	.345	.358	.336	.369	.359	.272
10.00	.402	.311	.318	.325	.334	.323	.211
15.00	.338	.259	.275	.277	.285	.257	.139
20.00	.293	.222	.242	.247	.249	.228	.045
25.00	.244	.196	.218	.226	.229	.198	-.004
30.00	.205	.183	.200	.211	.212	.170	-.033
35.00	.191	.184	.196	.205	.203	.150	-.062
40.00	.172	.196	.200	.206	.206	.138	-.077
45.00	.152	.229	.218	.223	.218	.138	-.099
50.00	.159	.281	.254	.256	.247	.153	-.119
55.00	.171	.355	.321	.313	.298	.192	-.137
60.00	.282	.370	.363	.383	.344	.225	-.134
65.00	.493	.317	.364	.370	.344	.208	-.141
70.00	.753						-.159
75.00	-1.030	-.704	-.380	-.311	-.344	-.286	-.170
80.00	-.376	-.795	-.384	-.327	-.350	-.271	-.185
85.00	-.279	-.725	-.393	-.346	-.367	-.284	-.194
90.00	-.173	-.599	-.398	-.351	-.375	-.298	-.201
95.00	-.106	-.353	-.358	-.321	-.355	-.322	-.208
GAP		.269	.371	.374	.347	.186	

TABLE IV

WING WITH LOWER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
M = 0.90 α = 12.1°							
UPPER SURFACE							
.00	-.001	-.578	-.660	-.452	-.673	-.482	-.423
1.25	-.426	-1.354	-1.233	-.865	-.700	-.524	-.384
2.50	-.611	-1.364	-1.164	-.872	-.694	-.493	-.381
5.00	-.690	-1.352	-1.150	-.881	-.682	-.507	-.359
7.50	-.693	-1.345	-1.137	-.892	-.674	-.505	-.372
10.00	-.732	-1.318	-1.130	-.902	-.674	-.504	-.366
15.00	-.701	-1.287	-1.120	-.853	-.662	-.490	-.355
20.00	-.684	-1.252	-1.102	-.835	-.654	-.473	-.350
25.00	-.661	-1.241	-1.094	-.809	-.641	-.462	-.336
30.00	-.639	-1.130	-1.067	-.782	-.633	-.453	-.330
35.00	-.595	-.711	-1.041	-.771	-.622	-.445	-.323
40.00	-.579	-.489	-.993	-.751	-.613	-.439	-.322
45.00	-.591	-.557	-.941	-.735	-.602	-.431	-.311
50.00	-.609	-.597	-.901	-.716	-.590	-.428	-.309
55.00	-.620	-.592	-.859	-.701	-.580	-.425	-.305
60.00	-.635	-.584	-.826	-.685	-.570	-.422	-.305
65.00	-.644	-.585	-.791	-.662	-.542	-.418	-.304
70.00	-.649	-.777	-.732	-.636	-.550	-.411	-.305
75.00	-.706	-.449	-.732	-.618	-.539	-.391	-.299
80.00	-.568	-.410	-.695	-.633	-.522	-.370	-.302
85.00	-.491	-.312	-.644	-.609	-.504	-.371	-.302
90.00	-.408	-.203	-.583	-.600	-.499	-.366	-.300
95.00	-.322	-.103	-.495	-.585	-.471	-.354	-.302
LOWER SURFACE							
1.25	.378	.594	.546	.498	.515	.498	.435
2.50	.534	.585	.549	.497	.511	.457	.442
5.00	.636	.528	.505	.467	.485	.450	.374
7.50	.615	.481	.477	.428	.435	.404	.313
10.00	.585	.443	.435	.417	.401	.369	.262
15.00	.507	.390	.386	.364	.344	.302	.190
20.00	.444	.348	.346	.328	.306	.266	.097
25.00	.387	.316	.314	.293	.270	.227	.043
30.00	.342	.294	.286	.269	.243	.191	.005
35.00	.320	.283	.271	.248	.221	.167	-.027
40.00	.293	.284	.263	.236	.210	.148	-.062
45.00	.265	.301	.266	.238	.211	.141	-.107
50.00	.261	.334	.286	.255	.227	.150	-.163
55.00	.261	.393	.334	.295	.270	.186	-.212
60.00	.355	.419	.381	.377	.333	.229	-.216
65.00	.554	.374	.384	.371	.344	.216	-.224
70.00	.798						-.222
75.00	-1.082	-.727	-.629	-.627	-.639	-.429	-.215
80.00	-.377	-1.056	-.644	-.693	-.633	-.418	-.208
85.00	-.243	-.883	-.641	-.719	-.625	-.402	-.215
90.00	-.046	-.320	-.613	-.703	-.611	-.383	-.230
95.00	.053	-.069	-.553	-.652	-.585	-.361	-.253
GAP		.333	.386	.374	.344	.184	
M = 0.94 α = 0.0°							
UPPER SURFACE							
.00	.023	-.533	-.496	-.739	-.476	-.468	-.335
1.25	-.205	-.072	-.108	-.181	-.299	-.432	-.532
2.50	-.147	-.049	-.083	-.155	-.233	-.328	-.428
5.00	-.073	-.051	-.085	-.097	-.226	-.289	-.322
7.50	-.046	-.067	-.103	-.136	-.240	-.291	-.352
10.00	-.028	-.084	-.118	-.167	-.256	-.300	-.358
15.00	-.013	-.111	-.147	-.205	-.258	-.305	-.369
20.00	-.066	-.128	-.172	-.234	-.285	-.341	-.382
25.00	-.088	-.150	-.195	-.258	-.321	-.368	-.388
30.00	-.107	-.171	-.220	-.268	-.337	-.377	-.354
35.00	-.117	-.191	-.242	-.302	-.365	-.392	-.305
40.00	-.127	-.209	-.271	-.332	-.394	-.385	-.287
45.00	-.158	-.237	-.299	-.376	-.432	-.378	-.258
50.00	-.184	-.266	-.338	-.415	-.437	-.383	-.232
55.00	-.205	-.279	-.370	-.441	-.390	-.401	-.197
60.00	-.223	-.309	-.411	-.409	-.328	-.344	-.167
65.00	-.239	-.370	-.425	-.323	-.287	-.239	-.148
70.00	-.277	-.834	-.528	-.347	-.314	-.223	-.144
75.00	-.399	-.168	-.177	-.232	-.257	-.190	-.129
80.00	-.238	-.186	-.201	-.253	-.252	-.140	-.112
85.00	-.267	-.185	-.214	-.249	-.252	-.140	-.112
90.00	-.258	-.183	-.250	-.248	-.251	-.142	-.096
95.00	-.281	-.186	-.271	-.246	-.253	-.143	-.102
LOWER SURFACE							
1.25	.240	-.040	-.053	.015	.129	.191	.160
2.50	.174	-.033	-.037	.006	.036	.047	.113
5.00	.101	-.037	-.038	.028	.031	.083	.043
7.50	.060	-.053	-.031	.024	.003	.051	.002
10.00	.039	-.064	-.041	.012	-.016	.036	-.030
15.00	.001	-.079	-.037	.023	-.014	.003	-.096
20.00	-.025	-.090	-.021	.017	.013	.013	-.138
25.00	-.054	-.096	-.010	.090	.003	.017	-.094
30.00	-.074	-.081	.000	.001	.023	.016	-.072
35.00	-.077	-.044	-.022	.023	.044	.026	-.062
40.00	-.085	-.018	.051	.052	.078	.042	-.056
45.00	-.084	-.106	.096	.097	.124	.080	-.073
50.00	-.063	-.209	.162	.164	.188	.135	-.094
55.00	.021	-.297	.244	.251	.271	.208	-.108
60.00	.174	-.268	.280	.329	.320	.236	-.088
65.00	.360	-.216	.285	.323	.315	.206	-.084
70.00	.559						-.093
75.00	-1.040	-.759	-.444	-.330	-.286	-.209	-.101
80.00	-.496	-.775	-.433	-.329	-.283	-.204	-.118
85.00	-.441	-.728	-.430	-.329	-.278	-.196	-.131
90.00	-.368	-.672	-.433	-.330	-.280	-.190	-.134
95.00	-.272	-.599	-.428	-.334	-.283	-.186	-.134
GAP		.174	.305	.340	.329	.205	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2

M = 0.94   α = 4.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.024	-.273	-.171	-.430	-.115	.093	-.151
1.25	-.043	-.716	-.895	-1.013	-1.061	-1.102	-1.130
2.50	-.061	-.646	-.846	-.997	-1.059	-1.062	-1.123
5.00	-.123	-.366	-.523	-.867	-.936	-1.036	-1.016
7.50	-.134	-.331	-.408	-.620	-.889	-.961	-1.021
10.00	-.169	-.303	-.388	-.435	-.854	-.929	-.968
15.00	-.183	-.293	-.372	-.431	-.559	-.882	-.823
20.00	-.224	-.296	-.372	-.447	-.474	-.790	-.828
25.00	-.244	-.303	-.382	-.457	-.509	-.592	-.826
30.00	-.254	-.305	-.391	-.451	-.520	-.553	-.646
35.00	-.241	-.323	-.404	-.472	-.541	-.580	-.509
40.00	-.249	-.336	-.421	-.495	-.556	-.605	-.523
45.00	-.273	-.365	-.448	-.521	-.589	-.638	-.526
50.00	-.295	-.389	-.473	-.552	-.615	-.673	-.508
55.00	-.315	-.397	-.486	-.568	-.646	-.715	-.310
60.00	-.333	-.412	-.506	-.578	-.641	-.574	-.156
65.00	-.345	-.451	-.534	-.507	-.450	-.280	-.145
70.00	-.369	-.814	-.454	-.331	-.321	-.220	-.154
75.00	-.500	-.306	-.431	-.529	-.605	-.255	-.153
80.00	-.331	-.342	-.358	-.451	-.489	-.184	-.155
85.00	-.355	-.308	-.330	-.406	-.401	-.171	-.162
90.00	-.358	-.237	-.346	-.383	-.347	-.137	-.165
95.00	-.341	-.173	-.356	-.346	-.267	-.142	-.173

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.366	.361	.377	.442	.444	.468	.390
2.50	.350	.290	.306	.301	.338	.323	.329
5.00	.302	.221	.237	.218	.276	.285	.236
7.50	.258	.175	.206	.171	.224	.237	.166
10.00	.231	.145	.176	.179	.193	.204	.120
15.00	.179	.107	.144	.144	.160	.148	.048
20.00	.144	.083	.125	.127	.135	.134	-.052
25.00	.106	.066	.116	.111	.124	.116	-.098
30.00	.077	.065	.105	.107	.119	.101	-.117
35.00	.069	.080	.112	.111	.125	.094	-.123
40.00	.054	.116	.125	.125	.141	.094	-.126
45.00	.043	.174	.154	.155	.171	.110	-.142
50.00	.060	.251	.201	.208	.218	.142	-.163
55.00	.098	.334	.278	.275	.280	.192	-.172
60.00	.239	.315	.309	.339	.312	.208	-.155
65.00	.445	.250	.305	.322	.305	.183	-.149
70.00	.680						-.148
75.00	-1.057	-.763	-.438	-.332	-.278	-.184	-.143
80.00	-.450	-.817	-.434	-.335	-.276	-.182	-.147
85.00	-.396	-.755	-.434	-.336	-.278	-.184	-.147
90.00	-.317	-.673	-.438	-.337	-.278	-.189	-.148
95.00	-.240	-.554	-.428	-.331	-.268	-.192	-.147
GAP		.204	.315	.330	.316	.171	

M = 0.94   α = 6.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.019	-.093	-.006	.247	-.075	.075	-.343
1.25	-.053	-1.024	-1.176	-1.250	-1.281	-1.306	-1.326
2.50	-.177	-1.042	-1.147	-1.231	-1.277	-1.214	-1.311
5.00	-.239	-.775	-1.076	-1.155	-1.190	-1.236	-1.185
7.50	-.250	-.576	-.971	-1.096	-1.152	-1.192	-1.218
10.00	-.289	-.479	-.757	-1.051	-1.122	-1.154	-1.194
15.00	-.290	-.416	-.506	-.925	-1.067	-1.105	-1.093
20.00	-.310	-.397	-.461	-.610	-1.031	-1.058	-1.072
25.00	-.332	-.390	-.456	-.535	-.977	-1.055	-1.046
30.00	-.340	-.387	-.465	-.516	-.742	-1.026	-1.004
35.00	-.318	-.398	-.474	-.537	-.629	-1.014	-.934
40.00	-.319	-.405	-.495	-.558	-.607	-.974	-.856
45.00	-.339	-.430	-.514	-.584	-.628	-.866	-.758
50.00	-.361	-.453	-.540	-.612	-.653	-.765	-.701
55.00	-.375	-.458	-.550	-.631	-.687	-.667	-.768
60.00	-.395	-.476	-.566	-.633	-.679	-.536	-.742
65.00	-.412	-.507	-.580	-.533	-.472	-.441	-.664
70.00	-.419	-.818	-.460	-.353	-.354	-.336	-.550
75.00	-.557	-.394	-.510	-.627	-.710	-.389	-.438
80.00	-.389	-.411	-.421	-.521	-.535	-.291	-.349
85.00	-.408	-.339	-.380	-.445	-.437	-.225	-.313
90.00	-.418	-.255	-.382	-.405	-.375	-.147	-.278
95.00	-.389	-.126	-.368	-.357	-.282	-.133	-.264

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.406	.470	.469	.493	.490	.507	.424
2.50	.428	.399	.402	.379	.411	.390	.383
5.00	.397	.320	.327	.304	.346	.352	.293
7.50	.358	.269	.293	.251	.293	.299	.232
10.00	.328	.236	.253	.254	.258	.266	.173
15.00	.270	.192	.218	.211	.220	.207	.101
20.00	.228	.158	.190	.187	.187	.184	-.003
25.00	.186	.136	.172	.167	.170	.164	-.058
30.00	.150	.129	.156	.155	.163	.142	-.087
35.00	.138	.138	.157	.154	.160	.131	-.107
40.00	.121	.162	.163	.162	.171	.128	-.120
45.00	.104	.208	.186	.186	.192	.135	-.137
50.00	.116	.274	.225	.229	.235	.162	-.156
55.00	.142	.352	.296	.291	.294	.208	-.168
60.00	.269	.334	.334	.358	.331	.230	-.154
65.00	.482	.273	.332	.344	.331	.204	-.156
70.00	.747						-.164
75.00	-1.074	-.780	-.446	-.339	-.280	-.177	-.168
80.00	-.466	-.877	-.445	-.342	-.277	-.165	-.168
85.00	-.401	-.797	-.449	-.344	-.277	-.170	-.166
90.00	-.324	-.690	-.451	-.343	-.271	-.176	-.166
95.00	-.221	-.511	-.435	-.335	-.261	-.181	-.168
GAP		.228	.342	.352	.336	.189	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.94   α = 8.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.015	-.066	-.164	.079	-.270	-.244	-.468
1.25	-.139	-1.086	-1.163	-1.324	-1.103	-.817	-.725
2.50	-.279	-1.109	-1.138	-1.308	-1.090	-.748	-.713
5.00	-.338	-.976	-1.045	-1.249	-1.064	-.783	-.660
7.50	-.348	-.866	-.935	-1.210	-1.045	-.785	-.673
10.00	-.394	-.799	-.856	-1.171	-1.035	-.783	-.671
15.00	-.381	-.693	-.760	-1.075	-1.008	-.785	-.706
20.00	-.394	-.567	-.670	-1.000	-.983	-.776	-.657
25.00	-.405	-.477	-.635	-.872	-.947	-.751	-.604
30.00	-.407	-.429	-.606	-.738	-.881	-.741	-.616
35.00	-.378	-.428	-.599	-.698	-.829	-.714	-.625
40.00	-.378	-.439	-.598	-.654	-.783	-.677	-.571
45.00	-.396	-.465	-.600	-.618	-.743	-.626	-.516
50.00	-.414	-.493	-.613	-.605	-.702	-.587	-.490
55.00	-.433	-.498	-.618	-.599	-.667	-.544	-.469
60.00	-.446	-.514	-.617	-.578	-.623	-.511	-.447
65.00	-.455	-.534	-.589	-.505	-.545	-.477	-.449
70.00	-.469	-.806	-.502	-.373	-.596	-.475	-.422
75.00	-.593	-.465	-.552	-.610	-.586	-.416	-.385
80.00	-.435	-.471	-.464	-.491	-.544	-.419	-.367
85.00	-.455	-.412	-.416	-.399	-.506	-.396	-.359
90.00	-.466	-.300	-.387	-.363	-.482	-.358	-.342
95.00	-.424	-.115	-.351	-.330	-.430	-.358	-.339

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.429	.544	.523	.494	.533	.534	.442
2.50	.491	.484	.471	.445	.468	.427	.420
5.00	.492	.404	.402	.373	.420	.404	.334
7.50	.453	.355	.367	.330	.359	.349	.273
10.00	.424	.320	.323	.320	.327	.317	.213
15.00	.358	.271	.284	.272	.276	.250	.139
20.00	.308	.235	.250	.243	.241	.223	.036
25.00	.266	.207	.228	.220	.216	.193	-.024
30.00	.226	.196	.206	.202	.202	.163	-.059
35.00	.208	.199	.200	.197	.194	.146	-.082
40.00	.187	.214	.202	.196	.197	.132	-.101
45.00	.168	.251	.218	.214	.210	.134	-.128
50.00	.175	.306	.252	.248	.242	.151	-.163
55.00	.190	.378	.318	.307	.296	.191	-.191
60.00	.308	.379	.361	.378	.341	.225	-.182
65.00	.516	.319	.362	.366	.344	.209	-.181
70.00	.774						-.196
75.00	-1.054	-.775	-.464	-.366	-.392	-.300	-.200
80.00	-.471	-.895	-.467	-.378	-.403	-.285	-.211
85.00	-.357	-.814	-.469	-.389	-.425	-.286	-.215
90.00	-.257	-.680	-.472	-.393	-.435	-.289	-.216
95.00	-.180	-.360	-.441	-.366	-.431	-.299	-.220
GAP		.270	.368	.371	.345	.186	

M = 0.98   α = 0.0°

UPPER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
.00	.048	.561	.511	.767	.494	.487	.393
1.25	.244	-.015	-.042	-.101	-.201	-.290	-.366
2.50	.187	-.002	-.028	-.091	-.157	-.216	-.289
5.00	.117	-.003	-.037	-.049	-.162	-.215	-.248
7.50	.093	-.023	-.059	-.084	-.183	-.224	-.280
10.00	.070	-.037	-.074	-.107	-.201	-.243	-.288
15.00	.032	-.066	-.103	-.153	-.213	-.249	-.303
20.00	-.021	-.083	-.127	-.180	-.235	-.286	-.348
25.00	-.044	-.107	-.156	-.212	-.273	-.314	-.389
30.00	-.064	-.129	-.173	-.218	-.289	-.331	-.388
35.00	-.075	-.150	-.197	-.248	-.315	-.358	-.374
40.00	-.084	-.168	-.220	-.277	-.347	-.385	-.402
45.00	-.114	-.191	-.250	-.314	-.387	-.419	-.422
50.00	-.141	-.219	-.281	-.356	-.412	-.449	-.431
55.00	-.166	-.230	-.308	-.388	-.444	-.500	-.453
60.00	-.179	-.252	-.342	-.400	-.448	-.506	-.431
65.00	-.196	-.304	-.381	-.397	-.392	-.419	-.327
70.00	-.227	-.891	-.629	-.464	-.424	-.320	-.326
75.00	-.350	-.129	-.161	-.170	-.225	-.380	-.304
80.00	-.196	-.172	-.183	-.231	-.280	-.321	-.297
85.00	-.224	-.184	-.180	-.240	-.297	-.318	-.284
90.00	-.227	-.169	-.215	-.270	-.321	-.324	-.247
95.00	-.253	-.142	-.247	-.298	-.339	-.316	-.215

LOWER SURFACE

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
1.25	.271	-.022	-.069	-.009	.102	.132	.097
2.50	.206	-.009	-.045	-.021	.019	-.004	.065
5.00	.135	-.015	-.037	-.031	.023	.048	.010
7.50	.093	-.030	-.025	-.022	-.003	.015	-.014
10.00	.071	-.040	-.029	-.010	-.022	.004	-.039
15.00	.031	-.060	-.019	-.007	-.021	.023	-.102
20.00	.004	-.074	-.008	-.002	-.020	.013	-.174
25.00	-.026	-.089	.023	.005	-.011	-.005	-.176
30.00	-.049	-.076	.031	.015	.007	-.001	-.125
35.00	-.056	-.018	.051	.034	.027	.010	-.086
40.00	-.069	-.061	.077	.059	.057	.024	-.083
45.00	-.075	-.148	.119	.103	.101	.053	-.099
50.00	-.043	-.252	.182	.165	.166	.107	-.149
55.00	-.053	-.330	.262	.249	.257	.188	-.213
60.00	-.215	-.299	.296	.327	.316	.227	-.220
65.00	-.388	-.229	.296	.318	.313	.199	-.210
70.00	-.583						-.207
75.00	-1.023	-.860	-.538	-.445	-.379	-.312	-.197
80.00	-.587	-.910	-.542	-.446	-.380	-.306	-.215
85.00	-.452	-.824	-.539	-.441	-.378	-.294	-.231
90.00	-.370	-.735	-.537	-.446	-.375	-.281	-.237
95.00	-.284	-.628	-.533	-.450	-.371	-.267	-.236
GAP		.194	.314	.334	.327	.197	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.98   α = 4.0°

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.045	.332	.235	.494	.192	.177	-.036
	1.25	.093	-.617	-.777	-.863	-.905	-.930	-.944
	2.50	-.007	-.574	-.738	-.846	-.902	-.904	-.945
	5.00	-.074	-.288	-.484	-.729	-.787	-.876	-.854
	7.50	-.087	-.260	-.328	-.567	-.750	-.801	-.849
	10.00	-.119	-.247	-.320	-.373	-.720	-.781	-.794
	15.00	-.137	-.249	-.313	-.368	-.501	-.742	-.678
	20.00	-.174	-.251	-.311	-.385	-.416	-.676	-.700
	25.00	-.194	-.257	-.327	-.399	-.454	-.533	-.720
	30.00	-.212	-.257	-.333	-.394	-.465	-.485	-.563
	35.00	-.202	-.273	-.350	-.413	-.480	-.509	-.463
	40.00	-.204	-.287	-.370	-.436	-.496	-.534	-.477
	45.00	-.228	-.314	-.393	-.465	-.529	-.567	-.491
	50.00	-.249	-.339	-.418	-.492	-.552	-.596	-.527
	55.00	-.276	-.345	-.430	-.511	-.582	-.633	-.565
	60.00	-.288	-.364	-.446	-.516	-.595	-.663	-.586
	65.00	-.297	-.390	-.471	-.514	-.554	-.565	-.578
	70.00	-.323	-.847	-.534	-.430	-.411	-.352	-.558
	75.00	-.450	-.264	-.398	-.500	-.574	-.596	-.524
	80.00	-.290	-.300	-.349	-.416	-.518	-.593	-.508
	85.00	-.314	-.287	-.297	-.372	-.470	-.495	-.479
	90.00	-.321	-.256	-.301	-.375	-.460	-.407	-.435
	95.00	-.314	-.136	-.325	-.389	-.431	-.348	-.295
LOWER SURFACE	1.25	.387	.374	.384	.435	.438	.452	.380
	2.50	.372	.307	.316	.312	.326	.296	.318
	5.00	.326	.237	.248	.228	.266	.264	.223
	7.50	.280	.193	.190	.190	.216	.211	.158
	10.00	.255	.166	.190	.192	.186	.184	.117
	15.00	.202	.130	.165	.157	.149	.130	.042
	20.00	.168	.104	.146	.138	.122	.114	-.058
	25.00	.130	.087	.139	.122	.110	.097	-.114
	30.00	.100	.087	.129	.115	.103	.080	-.135
	35.00	.091	.107	.133	.117	.105	.073	-.143
	40.00	.076	.143	.145	.127	.121	.075	-.137
	45.00	.065	.208	.171	.155	.151	.088	-.159
	50.00	.084	.288	.219	.202	.201	.122	-.200
	55.00	.127	.366	.292	.268	.263	.176	-.258
	60.00	.272	.338	.322	.330	.296	.195	-.255
	65.00	.472	.264	.317	.312	.289	.169	-.248
	70.00	.705						-.247
	75.00	-1.029	-.820	-.512	-.435	-.396	-.306	-.237
	80.00	-.513	-.905	-.519	-.442	-.399	-.297	-.247
	85.00	-.410	-.831	-.518	-.449	-.399	-.289	-.249
	90.00	-.350	-.728	-.520	-.459	-.403	-.282	-.249
	95.00	-.244	-.557	-.514	-.459	-.398	-.275	-.246
	GAP		.219	.328	.321	.299	.153	

M = 0.98   α = 5.9°

	PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE	.00	.040	.174	.079	.324	.020	.031	-.210
	1.25	.013	-.848	-.972	-1.038	-1.059	-1.071	-1.089
	2.50	-.105	-.864	-.962	-1.026	-1.064	-1.024	-1.083
	5.00	-.167	-.597	-.858	-.951	-.980	-1.023	-.985
	7.50	-.180	-.438	-.779	-.873	-.947	-.980	-1.003
	10.00	-.218	-.379	-.705	-.799	-.924	-.961	-.975
	15.00	-.225	-.344	-.421	-.724	-.840	-.920	-.858
	20.00	-.252	-.333	-.374	-.537	-.799	-.873	-.877
	25.00	-.268	-.334	-.386	-.467	-.799	-.860	-.890
	30.00	-.281	-.331	-.395	-.448	-.649	-.798	-.790
	35.00	-.264	-.340	-.408	-.468	-.551	-.792	-.696
	40.00	-.267	-.346	-.429	-.487	-.535	-.780	-.722
	45.00	-.286	-.372	-.449	-.515	-.559	-.738	-.750
	50.00	-.304	-.394	-.476	-.545	-.582	-.691	-.761
	55.00	-.323	-.401	-.486	-.562	-.618	-.674	-.767
	60.00	-.345	-.414	-.497	-.570	-.635	-.672	-.720
	65.00	-.349	-.433	-.513	-.558	-.596	-.549	-.636
	70.00	-.372	-.827	-.513	-.423	-.432	-.414	-.648
	75.00	-.498	-.336	-.487	-.591	-.651	-.642	-.648
	80.00	-.339	-.360	-.406	-.507	-.610	-.630	-.590
	85.00	-.361	-.336	-.343	-.435	-.561	-.547	-.590
	90.00	-.372	-.288	-.337	-.423	-.523	-.466	-.588
	95.00	-.364	-.118	-.355	-.418	-.470	-.396	-.500
LOWER SURFACE	1.25	.422	.479	.475	.516	.491	.501	.426
	2.50	.442	.410	.409	.389	.401	.370	.376
	5.00	.418	.332	.336	.308	.339	.334	.285
	7.50	.373	.283	.303	.262	.285	.282	.224
	10.00	.341	.252	.267	.258	.250	.249	.173
	15.00	.287	.209	.234	.217	.209	.192	.102
	20.00	.242	.176	.205	.192	.176	.171	-.009
	25.00	.203	.156	.192	.173	.159	.146	-.070
	30.00	.167	.148	.176	.159	.146	.127	-.103
	35.00	.155	.157	.173	.155	.145	.114	-.124
	40.00	.139	.187	.180	.160	.155	.110	-.134
	45.00	.122	.238	.201	.182	.177	.116	-.160
	50.00	.136	.308	.242	.224	.220	.139	-.206
	55.00	.164	.383	.310	.285	.281	.188	-.270
	60.00	.299	.365	.346	.353	.318	.214	-.277
	65.00	.506	.291	.342	.334	.314	.190	-.280
	70.00	.767						-.288
	75.00	-1.024	-.808	-.504	-.433	-.411	-.326	-.303
	80.00	-.469	-.929	-.510	-.445	-.418	-.312	-.302
	85.00	-.388	-.853	-.508	-.453	-.437	-.307	-.303
	90.00	-.305	-.732	-.513	-.462	-.430	-.306	-.308
	95.00	-.230	-.496	-.496	-.462	-.430	-.308	
	GAP		.245	.353	.341	.321	.169	

TABLE IV

WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 0.98   α = 7.9°

Surface	Percent Chord	PRESSURE COEFFICIENT, P, AT:
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER	.00	.029	.015	-.079	.159	-.167	-.155	-.398
	1.25	-.073	-1.026	-1.120	-1.182	-1.189	-1.178	-.929
	2.50	-.211	-1.058	-1.109	-1.168	-1.191	-1.097	-.918
	5.00	-.274	-.901	-1.068	-1.112	-1.124	-1.133	-.847
	7.50	-.287	-.722	-1.017	-1.070	-1.095	-1.100	-.878
	10.00	-.328	-.616	-.972	-1.035	-1.079	-1.076	-.869
	15.00	-.326	-.538	-.869	-.956	-1.033	-1.033	-.836
	20.00	-.340	-.483	-.604	-.901	-1.007	-.984	-.829
	25.00	-.349	-.445	-.522	-.894	-1.003	-.962	-.807
	30.00	-.358	-.416	-.487	-.701	-.934	-.902	-.800
	35.00	-.334	-.411	-.485	-.647	-.902	-.864	-.759
	40.00	-.335	-.414	-.499	-.617	-.884	-.826	-.751
	45.00	-.349	-.434	-.519	-.601	-.823	-.777	-.722
	50.00	-.366	-.456	-.543	-.601	-.739	-.724	-.706
	55.00	-.385	-.461	-.553	-.611	-.699	-.685	-.685
	60.00	-.401	-.473	-.564	-.619	-.665	-.676	-.657
	65.00	-.405	-.487	-.573	-.589	-.587	-.641	-.634
	70.00	-.420	-.805	-.513	-.422	-.547	-.626	-.620
	75.00	-.547	-.430	-.562	-.658	-.717	-.653	-.599
	80.00	-.392	-.429	-.466	-.580	-.610	-.587	-.591
	85.00	-.414	-.391	-.393	-.491	-.560	-.576	-.588
	90.00	-.428	-.326	-.384	-.453	-.514	-.541	-.566
	95.00	-.408	-.123	-.392	-.427	-.460	-.513	-.544
LOWER	1.25	.450	.555	.532	.506	.536	.523	.451
	2.50	.509	.494	.478	.447	.465	.418	.426
	5.00	.508	.418	.408	.375	.413	.395	.338
	7.50	.471	.370	.374	.334	.353	.344	.270
	10.00	.440	.335	.333	.323	.316	.310	.224
	15.00	.376	.286	.295	.276	.267	.244	.149
	20.00	.327	.246	.260	.245	.232	.218	.039
	25.00	.280	.224	.240	.222	.211	.192	-.029
	30.00	.242	.214	.221	.205	.196	.164	-.069
	35.00	.226	.217	.215	.196	.189	.148	-.099
	40.00	.204	.237	.215	.195	.192	.135	-.117
	45.00	.183	.277	.230	.209	.210	.135	-.150
	50.00	.195	.333	.263	.246	.243	.150	-.204
	55.00	.210	.403	.328	.303	.299	.190	-.279
	60.00	.332	.395	.367	.373	.344	.221	-.296
	65.00	.539	.329	.366	.360	.344	.202	-.320
	70.00	.806						-.339
	75.00	-1.016	-.788	-.506	-.426	-.424	-.424	-.342
	80.00	-.425	-.961	-.512	-.441	-.427	-.405	-.354
	85.00	-.354	-.865	-.511	-.450	-.437	-.422	-.366
	90.00	-.270	-.716	-.511	-.458	-.440	-.444	-.370
	95.00	-.194	-.316	-.480	-.449	-.436	-.468	-.376
	GAP		.284	.375	.364	.347	.175	

M = 1.00   α = 0.0°

Surface	Percent Chord	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER	.00	.069	.576	.523	.772	.510	.501	.407
	1.25	.260	-.001	-.028	-.084	-.194	-.284	-.365
	2.50	.208	-.017	-.013	-.075	-.143	-.203	-.284
	5.00	.138	-.015	-.020	-.036	-.147	-.202	-.236
	7.50	.112	-.007	-.044	-.072	-.166	-.209	-.269
	10.00	.093	-.020	-.058	-.088	-.183	-.222	-.275
	15.00	.049	-.050	-.085	-.137	-.195	-.232	-.289
	20.00	-.002	-.066	-.109	-.164	-.216	-.264	-.332
	25.00	-.024	-.089	-.136	-.192	-.252	-.292	-.369
	30.00	-.044	-.110	-.154	-.200	-.269	-.309	-.374
	35.00	-.057	-.134	-.178	-.232	-.292	-.337	-.370
	40.00	-.063	-.150	-.203	-.259	-.321	-.364	-.388
	45.00	-.094	-.176	-.230	-.294	-.360	-.399	-.413
	50.00	-.125	-.204	-.260	-.332	-.393	-.432	-.425
	55.00	-.148	-.217	-.285	-.364	-.426	-.480	-.449
	60.00	-.162	-.231	-.317	-.385	-.437	-.504	-.448
	65.00	-.179	-.280	-.356	-.388	-.406	-.459	-.406
	70.00	-.207	-.873	-.616	-.470	-.467	-.362	-.341
	75.00	-.331	-.116	-.152	-.170	-.198	-.318	-.284
	80.00	-.180	-.160	-.180	-.215	-.255	-.288	-.292
	85.00	-.208	-.172	-.168	-.227	-.275	-.297	-.291
	90.00	-.209	-.161	-.199	-.252	-.299	-.301	-.285
	95.00	-.239	-.131	-.227	-.278	-.312	-.306	-.279
LOWER	1.25	.289	.000	-.049	.009	.133	.157	.121
	2.50	.226	-.010	-.028	.001	.045	.019	.089
	5.00	.158	-.006	-.022	-.020	.047	.072	.036
	7.50	.117	-.009	-.008	.014	.022	.039	-.002
	10.00	.097	-.022	-.010	-.006	.001	.027	.015
	15.00	.056	-.040	-.004	-.012	.002	.004	-.074
	20.00	.027	-.055	-.030	-.017	.001	.009	-.152
	25.00	-.005	-.077	-.046	-.023	-.008	.015	-.162
	30.00	-.031	-.078	-.056	-.034	-.027	.020	-.119
	35.00	-.036	-.003	-.076	-.051	-.046	.030	-.075
	40.00	-.051	-.078	-.101	-.077	-.074	.041	-.073
	45.00	-.065	-.168	-.139	-.118	-.117	.067	-.088
	50.00	-.035	-.271	-.200	-.181	-.181	.118	-.140
	55.00	.073	-.355	-.277	-.263	-.270	.200	-.220
	60.00	.242	-.320	-.308	-.341	-.329	.240	-.254
	65.00	.413	-.264	-.313	-.333	-.330	.217	-.273
	70.00	.589						-.272
	75.00	-.986	-.835	-.526	-.456	-.424	-.357	-.258
	80.00	-.582	-.884	-.532	-.458	-.427	-.331	-.261
	85.00	-.408	-.802	-.531	-.459	-.430	-.329	-.278
	90.00	-.338	-.714	-.530	-.468	-.431	-.320	-.284
	95.00	-.268	-.608	-.527	-.476	-.432	-.313	-.279
	GAP		.238	.332	.347	.341	.213	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
	M = 1.00 α = 4.0°							
UPPER SURFACE	.00	.053	-.359	-.262	-.511	-.214	-.203	-.013
	1.25	.113	-.601	-.770	-.855	-.895	-.908	-.939
	2.50	.022	-.558	-.728	-.843	-.892	-.886	-.942
	5.00	-.046	-.265	-.483	-.733	-.786	-.863	-.846
	7.50	-.061	-.240	-.299	-.579	-.748	-.798	-.847
	10.00	-.092	-.223	-.297	-.360	-.719	-.777	-.805
	15.00	-.112	-.225	-.292	-.340	-.513	-.739	-.685
	20.00	-.152	-.230	-.294	-.363	-.391	-.681	-.702
	25.00	-.170	-.234	-.303	-.377	-.427	-.540	-.728
	30.00	-.186	-.236	-.312	-.374	-.440	-.461	-.587
	35.00	-.179	-.252	-.326	-.393	-.456	-.484	-.469
	40.00	-.183	-.261	-.347	-.413	-.474	-.508	-.469
	45.00	-.209	-.291	-.369	-.439	-.501	-.540	-.471
	50.00	-.230	-.315	-.396	-.467	-.527	-.568	-.505
	55.00	-.249	-.321	-.408	-.486	-.557	-.605	-.547
	60.00	-.266	-.337	-.421	-.491	-.569	-.637	-.570
	65.00	-.274	-.362	-.446	-.491	-.539	-.598	-.580
	70.00	-.295	-.820	-.525	-.428	-.429	-.401	-.574
	75.00	-.424	-.243	-.390	-.503	-.563	-.555	-.554
	80.00	-.273	-.284	-.341	-.413	-.522	-.560	-.538
	85.00	-.295	-.274	-.288	-.357	-.464	-.509	-.556
	90.00	-.302	-.254	-.282	-.355	-.450	-.443	-.555
	95.00	-.292	-.120	-.304	-.369	-.427	-.402	-.495
LOWER SURFACE	1.25	.401	.394	.400	.455	.453	.465	.389
	2.50	.390	.326	.333	.330	.347	.314	.332
	5.00	.344	.257	.266	.245	.287	.281	.239
	7.50	.301	.216	.238	.200	.235	.231	.190
	10.00	.276	.187	.208	.207	.206	.204	.133
	15.00	.223	.150	.184	.178	.171	.148	.061
	20.00	.187	.124	.168	.159	.142	.131	-.041
	25.00	.150	.106	.159	.144	.129	.114	-.102
	30.00	.119	.105	.151	.136	.122	.099	-.127
	35.00	.109	.126	.155	.137	.123	.091	-.138
	40.00	.095	.166	.164	.146	.139	.091	-.136
	45.00	.082	.230	.192	.174	.167	.101	-.154
	50.00	.102	.314	.238	.221	.215	.131	-.202
	55.00	.145	.387	.309	.286	.277	.183	-.278
	60.00	.293	.360	.338	.346	.310	.203	-.299
	65.00	.490	.281	.334	.328	.303	.181	-.313
	70.00	.719						-.314
	75.00	-.996	-.796	-.498	-.437	-.420	-.356	-.315
	80.00	-.490	-.883	-.507	-.445	-.436	-.348	-.324
	85.00	-.392	-.814	-.506	-.454	-.432	-.343	-.328
	90.00	-.322	-.706	-.507	-.464	-.440	-.342	-.322
	95.00	-.233	-.526	-.503	-.468	-.445	-.345	-.318
	GAP		.240	.345	.334	.311	.162	
	M = 1.00 α = 5.9°							
UPPER SURFACE	.00	.033	-.206	-.103	-.346	.047	.056	-.181
	1.25	.037	-.844	-.959	-1.023	-1.049	-1.062	-1.078
	2.50	-.082	-.866	-.948	-1.013	-1.053	-1.005	-1.072
	5.00	-.149	-.601	-.866	-.940	-.974	-1.011	-.970
	7.50	-.157	-.421	-.797	-.879	-.941	-.972	-.992
	10.00	-.198	-.362	-.731	-.819	-.918	-.950	-.969
	15.00	-.205	-.326	-.412	-.748	-.854	-.914	-.864
	20.00	-.229	-.311	-.352	-.548	-.821	-.869	-.879
	25.00	-.254	-.311	-.363	-.448	-.673	-.866	-.808
	30.00	-.258	-.310	-.375	-.425	-.545	-.815	-.726
	35.00	-.244	-.317	-.385	-.444	-.517	-.808	-.757
	40.00	-.248	-.326	-.406	-.463	-.535	-.798	-.775
	45.00	-.263	-.351	-.429	-.490	-.559	-.759	-.787
	50.00	-.284	-.372	-.457	-.520	-.559	-.699	-.787
	55.00	-.306	-.377	-.464	-.543	-.593	-.665	-.801
	60.00	-.322	-.394	-.474	-.550	-.613	-.659	-.784
	65.00	-.331	-.410	-.489	-.541	-.587	-.574	-.688
	70.00	-.347	-.798	-.501	-.418	-.433	-.444	-.686
	75.00	-.477	-.320	-.477	-.578	-.639	-.598	-.671
	80.00	-.319	-.342	-.402	-.506	-.608	-.611	-.647
	85.00	-.340	-.321	-.332	-.429	-.569	-.570	-.652
	90.00	-.354	-.285	-.317	-.408	-.533	-.519	-.652
	95.00	-.347	-.103	-.338	-.406	-.474	-.468	-.574
LOWER SURFACE	1.25	.438	.498	.488	.531	.500	.511	.434
	2.50	.462	.425	.422	.404	.413	.380	.387
	5.00	.434	.352	.351	.326	.349	.342	.299
	7.50	.393	.303	.320	.277	.297	.291	.242
	10.00	.365	.270	.284	.278	.265	.258	.188
	15.00	.308	.225	.251	.237	.225	.201	.119
	20.00	.265	.196	.224	.213	.193	.181	.008
	25.00	.224	.175	.209	.192	.173	.157	-.057
	30.00	.189	.170	.195	.179	.161	.136	-.089
	35.00	.175	.180	.192	.174	.158	.125	-.110
	40.00	.157	.212	.197	.178	.169	.121	-.122
	45.00	.140	.263	.218	.199	.189	.127	-.147
	50.00	.155	.331	.260	.238	.230	.150	-.198
	55.00	.183	.405	.327	.299	.290	.198	-.275
	60.00	.320	.383	.360	.366	.328	.222	-.297
	65.00	.524	.309	.359	.348	.323	.200	-.316
	70.00	.784						-.326
	75.00	-.989	-.780	-.490	-.427	-.417	-.362	-.327
	80.00	-.440	-.907	-.498	-.439	-.424	-.350	-.338
	85.00	-.367	-.830	-.496	-.451	-.435	-.350	-.345
	90.00	-.286	-.708	-.498	-.463	-.445	-.352	-.342
	95.00	-.218	-.467	-.483	-.460	-.447	-.363	-.342
	GAP		.265	.367	.353	.332	.179	

TABLE IV — WING WITH LOWER SURFACE SPOILER (WITH GAP)

$M = 1.00$, $\alpha = 7.9°$

PERCENT CHORD	_	PRESSURE COEFFICIENT, P, AT:	_	_	_	_	_
	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.004	.060	-.030	.201	-.115	-.097	-.339
1.25	-.029	.956	-1.048	-1.107	-1.132	-1.133	-1.141
2.50	-.162	.983	-1.038	-1.095	-1.124	-1.060	-1.129
5.00	-.230	.824	-.992	-1.034	-1.056	-1.084	-1.027
7.50	-.244	.630	-.944	-.991	-1.023	-1.049	-1.062
10.00	-.280	.518	-.897	-.953	-1.004	-1.030	-1.033
15.00	-.282	.451	-.766	-.883	-.962	-.992	-.926
20.00	-.298	.415	-.548	-.802	-.936	-.951	-.933
25.00	-.307	.398	-.469	-.787	-.931	-.962	-.929
30.00	-.314	.376	-.434	-.636	-.854	-.925	-.878
35.00	-.293	.372	-.438	-.579	-.800	-.919	-.818
40.00	-.294	.374	-.451	-.561	-.780	-.908	-.833
45.00	-.311	.395	-.473	-.554	-.753	-.885	-.843
50.00	-.323	.417	-.499	-.560	-.696	-.851	-.845
55.00	-.345	.419	-.508	-.573	-.667	-.711	-.846
60.00	-.364	.430	-.517	-.580	-.646	-.658	-.833
65.00	-.369	.443	-.525	-.565	-.583	-.629	-.769
70.00	-.389	.775	-.497	-.414	-.533	-.623	-.768
75.00	-.511	.386	-.531	-.621	-.695	-.683	-.751
80.00	-.354	.390	-.441	-.556	-.639	-.679	-.719
85.00	-.377	.363	-.363	-.468	-.617	-.642	-.723
90.00	-.391	.311	-.348	-.439	-.574	-.580	-.709
95.00	-.378	.105	.362	-.420	-.503	-.543	-.665
LOWER SURFACE							
1.25	.467	.572	.544	.532	.541	.544	.458
2.50	.525	.509	.488	.460	.466	.422	.430
5.00	.526	.430	.418	.389	.416	.399	.340
7.50	.487	.382	.384	.344	.356	.346	.283
10.00	.457	.349	.347	.336	.322	.312	.231
15.00	.393	.299	.309	.288	.272	.250	.158
20.00	.344	.267	.277	.261	.239	.225	.050
25.00	.299	.242	.257	.236	.214	.199	-.017
30.00	.259	.232	.238	.220	.202	.175	-.059
35.00	.243	.235	.231	.211	.193	.159	-.088
40.00	.219	.254	.232	.211	.198	.149	-.107
45.00	.200	.297	.247	.226	.216	.150	-.139
50.00	.212	.355	.279	.261	.249	.166	-.192
55.00	.227	.424	.344	.316	.305	.208	-.269
60.00	.352	.417	.381	.385	.348	.239	-.292
65.00	.558	.347	.381	.370	.349	.218	-.318
70.00	.833						-.339
75.00	.973	.756	-.492	-.421	-.435	-.395	-.349
80.00	-.402	.922	-.499	-.438	-.443	-.378	-.363
85.00	-.329	.835	-.497	-.450	-.455	-.391	-.381
90.00	-.239	.692	-.497	-.459	-.460	-.412	-.389
95.00	-.179	.319	-.469	-.452	-.456	-.436	-.401
GAP		.293	.388	.375	.351	.193	

$M = 1.03$, $\alpha = 0.0°$

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	.055	.572	.518	.789	.536	.532	.441
1.25	.205	.025	.046	.063	-.184	.273	.352
2.50	.164	-.004	-.028	-.059	-.125	-.183	-.259
5.00	.095	-.005	-.037	-.022	-.123	-.170	-.202
7.50	.069	-.024	-.052	-.059	-.141	-.180	-.229
10.00	.056	-.034	-.068	-.079	-.155	-.194	-.232
15.00	.025	-.063	-.094	-.123	-.167	-.196	-.249
20.00	.024	-.077	-.120	-.146	-.186	-.229	-.282
25.00	-.038	-.095	-.138	-.171	-.220	-.251	-.315
30.00	-.048	-.111	-.157	-.182	-.234	-.268	-.321
35.00	-.072	-.137	-.174	-.211	-.255	-.295	-.328
40.00	-.077	-.155	-.198	-.235	-.279	-.322	-.345
45.00	-.099	-.183	-.224	-.264	-.316	-.357	-.366
50.00	-.129	-.208	-.250	-.295	-.342	-.389	-.379
55.00	-.154	-.216	-.262	-.312	-.379	-.436	-.406
60.00	-.168	-.232	-.283	-.340	-.395	-.471	-.417
65.00	-.184	-.262	-.321	-.357	-.381	-.452	-.409
70.00	-.208	-.831	-.559	-.433	-.422	-.337	-.334
75.00	-.339	-.134	-.166	-.203	-.210	-.321	-.262
80.00	-.188	-.169	-.183	-.186	-.223	-.286	-.250
85.00	-.206	-.181	-.155	-.189	-.235	-.284	-.250
90.00	-.207	-.162	-.172	-.211	-.258	-.268	-.242
95.00	-.194	-.110	-.189	-.236	-.268	-.269	-.240
LOWER SURFACE							
1.25	.242	-.006	-.059	.022	.170	.232	.175
2.50	.184	.001	-.041	.014	.089	.067	.142
5.00	.119	.005	-.050	-.003	.086	.118	.091
7.50	.081	-.020	-.054	-.021	.062	.084	.058
10.00	.065	.032	-.074	.038	.042	.071	.033
15.00	.032	.047	-.088	.037	.043	.039	-.027
20.00	.011	.064	.057	.047	.040	.049	-.102
25.00	.022	.084	.079	.055	.049	.055	-.117
30.00	-.043	.102	.081	.069	.066	.059	-.078
35.00	-.047	.124	.099	.085	.086	.071	-.036
40.00	-.062	.058	.123	.111	.115	.084	-.031
45.00	-.087	.197	.163	.154	.154	.105	-.047
50.00	-.108	.305	.222	.216	.220	.153	-.095
55.00	.008	.367	.296	.293	.306	.233	-.181
60.00	.244	.330	.331	.358	.362	.270	-.223
65.00	.405	.239	.347	.352	.361	.244	-.249
70.00	.593						-.245
75.00	.940	.797	-.489	-.416	-.389	-.318	-.230
80.00	-.529	.842	-.493	-.420	-.394	-.307	-.230
85.00	-.405	.761	-.490	-.424	-.394	-.306	-.248
90.00	-.335	.666	-.487	-.434	-.397	-.296	-.255
95.00	-.271	.554	-.481	-.444	-.403	-.291	-.252
GAP		.240	.365	.365	.375	.243	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

M = 1.03   α = 4.0°

PERCENT CHORD	PRESSURE COEFFICIENT, P, AT: 0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.069	-.392	-.301	-.546	-.253	-.245	-.035
1.25	-.098	-.603	-.762	-.838	-.877	-.883	-.906
2.50	-.009	-.568	-.732	-.834	-.884	-.855	-.913
5.00	-.064	-.276	-.576	-.745	-.791	-.842	-.809
7.50	-.087	-.237	-.271	-.634	-.753	-.796	-.822
10.00	-.109	-.224	-.261	-.409	-.721	-.771	-.796
15.00	-.129	-.223	-.267	-.310	-.570	-.733	-.696
20.00	-.159	-.217	-.273	-.327	-.356	-.684	-.701
25.00	-.171	-.222	-.279	-.341	-.377	-.567	-.703
30.00	-.175	-.226	-.288	-.340	-.392	-.423	-.597
35.00	-.180	-.238	-.298	-.359	-.410	-.429	-.470
40.00	-.183	-.245	-.319	-.379	-.427	-.453	-.442
45.00	-.197	-.269	-.342	-.404	-.455	-.484	-.419
50.00	-.218	-.293	-.367	-.432	-.477	-.512	-.448
55.00	-.238	-.300	-.378	-.445	-.508	-.549	-.486
60.00	-.253	-.313	-.386	-.455	-.523	-.580	-.510
65.00	-.265	-.335	-.402	-.454	-.499	-.558	-.531
70.00	-.277	-.766	-.474	-.384	-.383	-.362	-.528
75.00	-.406	-.229	-.382	-.489	-.536	-.533	-.518
80.00	-.253	-.259	-.321	-.410	-.509	-.531	-.520
85.00	-.271	-.269	-.267	-.334	-.461	-.504	-.542
90.00	-.282	-.242	-.243	-.317	-.432	-.451	-.555
95.00	-.279	-.091	-.259	-.325	-.388	-.403	-.518
LOWER SURFACE							
1.25	.344	.376	.402	.482	.486	.510	.428
2.50	.352	.310	.336	.358	.385	.351	.371
5.00	.317	.247	.275	.274	.322	.321	.285
7.50	.277	.208	.252	.241	.273	.271	.237
10.00	.256	.180	.223	.247	.242	.244	.180
15.00	.209	.147	.207	.213	.211	.191	.109
20.00	.174	.122	.193	.194	.184	.173	.012
25.00	.141	.110	.189	.180	.168	.157	-.050
30.00	.113	.116	.182	.173	.163	.140	-.076
35.00	.103	.143	.187	.177	.165	.134	-.088
40.00	.095	.192	.198	.186	.181	.135	-.087
45.00	.088	.261	.225	.213	.207	.146	-.104
50.00	.115	.345	.274	.258	.253	.173	-.151
55.00	.161	.420	.343	.322	.314	.221	-.232
60.00	.320	.389	.371	.382	.347	.244	-.258
65.00	.512	.302	.369	.364	.342	.220	-.276
70.00	.747						-.278
75.00	.927	-.745	-.449	-.389	-.373	-.322	-.280
80.00	-.442	-.828	-.457	-.398	-.381	-.310	-.286
85.00	-.364	-.756	-.456	-.408	-.389	-.308	-.291
90.00	-.301	-.646	-.455	-.417	-.395	-.307	-.287
95.00	-.237	-.464	-.450	-.421	-.402	-.313	-.284
GAP		.266	.380	.371	.350	.203	

M = 1.03   α = 5.9°

PERCENT CHORD	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
UPPER SURFACE							
.00	-.084	-.255	-.147	-.388	-.094	-.103	-.126
1.25	-.052	-.814	-.882	-.946	-.975	-.984	-1.000
2.50	-.052	-.795	-.874	-.932	-.977	-.930	-.997
5.00	-.131	-.623	-.804	-.870	-.903	-.937	-.894
7.50	-.147	-.379	-.721	-.813	-.868	-.899	-.916
10.00	-.177	-.305	-.676	-.744	-.846	-.879	-.896
15.00	-.191	-.289	-.425	-.679	-.787	-.802	-.801
20.00	-.214	-.277	-.315	-.564	-.733	-.795	-.813
25.00	-.223	-.277	-.328	-.414	-.737	-.733	-.815
30.00	-.226	-.275	-.335	-.378	-.653	-.722	-.741
35.00	-.220	-.283	-.346	-.393	-.528	-.719	-.660
40.00	-.220	-.291	-.362	-.409	-.469	-.706	-.676
45.00	-.236	-.312	-.384	-.433	-.476	-.666	-.689
50.00	-.252	-.334	-.412	-.463	-.496	-.620	-.700
55.00	-.275	-.340	-.419	-.477	-.527	-.600	-.715
60.00	-.288	-.351	-.426	-.494	-.547	-.527	-.719
65.00	-.294	-.365	-.437	-.485	-.526	-.400	-.654
70.00	-.310	-.737	-.452	-.370	-.381	-.541	-.637
75.00	-.436	-.284	-.446	-.530	-.579	-.561	-.620
80.00	-.284	-.298	-.370	-.472	-.559	-.536	-.604
85.00	-.304	-.288	-.299	-.391	-.529	-.498	-.620
90.00	-.313	-.247	-.273	-.359	-.494	-.449	-.630
95.00	-.305	-.067	-.285	-.354	-.428		-.564
LOWER SURFACE							
1.25	.386	.503	.505	.566	.532	.545	.465
2.50	.439	.435	.441	.440	.449	.410	.416
5.00	.431	.362	.373	.361	.385	.378	.330
7.50	.399	.316	.343	.315	.335	.327	.279
10.00	.372	.287	.309	.316	.300	.295	.223
15.00	.318	.245	.280	.273	.262	.236	.159
20.00	.276	.217	.257	.251	.231	.218	.048
25.00	.237	.199	.243	.232	.212	.196	-.016
30.00	.204	.195	.230	.219	.200	.175	-.050
35.00	.191	.208	.230	.216	.197	.163	-.070
40.00	.177	.243	.235	.219	.207	.158	-.079
45.00	.162	.298	.254	.241	.228	.166	-.102
50.00	.183	.368	.295	.280	.268	.187	-.153
55.00	.211	.440	.361	.337	.327	.233	-.231
60.00	.352	.418	.394	.401	.364	.257	-.257
65.00	.549	.341	.393	.385	.359	.235	-.279
70.00	.816						-.289
75.00	.921	-.722	-.441	-.376	-.367	-.325	-.293
80.00	-.403	-.835	-.447	-.388	-.377	-.313	-.303
85.00	-.322	-.759	-.447	-.399	-.385	-.313	-.312
90.00	-.256	-.639	-.446	-.408	-.390	-.320	-.311
95.00	-.194	-.407	-.433	-.408	-.399	-.333	-.312
GAP		.299	.401	.389	.364	.216	

TABLE IV   WING WITH LOWER SURFACE SPOILER (WITH GAP)

	PERCENT CHORD	PRESSURE COEFFICIENT, P, AT:						
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
	M = 1.03 α = 7.9°							
UPPER SURFACE	.00	-.110	.097	.005	-.240	-.075	-.053	-.289
	1.25	-.005	-.952	-.991	-1.045	-1.062	-1.074	-1.077
	2.50	-.128	-.945	-.980	-1.032	-1.064	-1.000	-1.072
	5.00	-.208	-.865	-.946	-.981	-.998	-1.028	-.966
	7.50	-.228	-.677	-.900	-.939	-.969	-.994	-1.003
	10.00	-.258	-.490	-.868	-.902	-.953	-.974	-.985
	15.00	-.267	-.400	-.790	-.838	-.910	-.937	-.891
	20.00	-.284	-.366	-.618	-.798	-.882	-.897	-.894
	25.00	-.286	-.355	-.454	-.788	-.880	-.906	-.895
	30.00	-.284	-.344	-.401	-.674	-.835	-.873	-.850
	35.00	-.273	-.345	-.393	-.569	-.799	-.866	-.792
	40.00	-.269	-.347	-.402	-.536	-.779	-.861	-.810
	45.00	-.283	-.365	-.425	-.520	-.761	-.851	-.829
	50.00	-.297	-.385	-.450	-.517	-.699	-.854	-.836
	55.00	-.318	-.386	-.459	-.516	-.628	-.733	-.834
	60.00	-.332	-.396	-.468	-.527	-.599	-.641	-.786
	65.00	-.337	-.408	-.476	-.508	-.537	-.618	-.745
	70.00	-.354	-.719	-.444	-.369	-.511	-.609	-.749
	75.00	-.476	-.350	-.488	-.566	-.650	-.650	-.750
	80.00	-.322	-.352	-.401	-.515	-.597	-.627	-.728
	85.00	-.340	-.318	-.316	-.431	-.585	-.598	-.732
	90.00	-.353	-.267	-.298	-.395	-.536	-.549	-.733
	95.00	-.334	-.069	-.308	-.376	-.480	-.505	-.681
LOWER SURFACE	1.25	.432	.594	.572	.564	.572	.577	.487
	2.50	.523	.533	.519	.497	.500	.448	.459
	5.00	.548	.459	.450	.421	.450	.436	.374
	7.50	.517	.412	.419	.383	.392	.377	.313
	10.00	.488	.376	.381	.372	.357	.345	.266
	15.00	.423	.332	.345	.326	.308	.283	.197
	20.00	.371	.296	.313	.299	.275	.259	.089
	25.00	.325	.274	.294	.274	.252	.233	.025
	30.00	.287	.262	.275	.258	.238	.210	-.017
	35.00	.269	.267	.269	.248	.229	.193	-.048
	40.00	.251	.289	.270	.247	.232	.183	-.065
	45.00	.231	.330	.285	.263	.248	.185	-.096
	50.00	.245	.390	.317	.295	.282	.199	-.150
	55.00	.255	.458	.379	.349	.337	.239	-.234
	60.00	.386	.447	.415	.418	.376	.270	-.261
	65.00	.585	.382	.415	.403	.380	.251	-.289
	70.00	.859						-.304
	75.00	-.913	-.698	-.440	-.373	-.398	-.375	-.317
	80.00	-.400	-.848	-.446	-.391	-.405	-.355	-.330
	85.00	-.297	-.763	-.442	-.403	-.418	-.368	-.348
	90.00	-.194	-.627	-.443	-.412	-.422	-.391	-.355
	95.00	-.072	-.301	-.415	-.405	-.422	-.414	-.365
	GAP		.332	.424	.407	.383	.226	

Figure 1.- Geometry of test configurations.
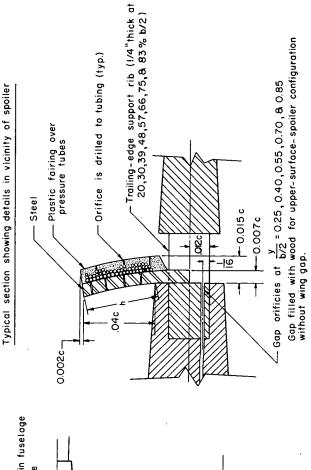
	Spoiler- orifice locations, z/h					
	$\frac{y}{b/2} = 0.25$	$\frac{y}{b/2} = 0.40$	$\frac{y}{b/2} = 0.55$	$\frac{y}{b/2} = 0.70$	$\frac{y}{b/2} = 0.85$	
Front	0.201	0.207	0.177	0.188	0.159	
Front	.455	.448	.422	.435	.405	
Front	.704	.720	.668	.687	.643	
Front	.917	.898	.866	.880	.835	
Back	.060	.035	.030	.091	.178	
Back	.448	.445	.428	.413	.463	
Back	.865	.841	.808	.810	.801	

Chordwise locations of wing orifices at each station are given with the pressure coefficient data in Tables I – IV.

Typical section showing details in vicinity of spoiler

Steel

Plastic fairing over pressure tubes

Orifice is drilled to tubing (typ.)

Trailing-edge support rib (1/4"thick at 20,39,48,57,66,75,& 83 % b/2)

0.015 c

.02c

16

0.007c

Gap orifices at $\frac{y}{b/2}$ = 0.25, 0.40, 0.55, 0.70, & 0.85.

Gap filled with wood for upper-surface-spoiler configuration without wing gap.

.04c h

0.002c

Orifices are located in fuselage 0.1" from wing surface

Wing orifice stations

0.135 b/2

.25 b/2

.40 b/2

.55b/2

.70b/2

.85b/2

.95b/2

0.70 c

Figure 2.– Pressure-orifice locations and details of spoiler and wing gap.
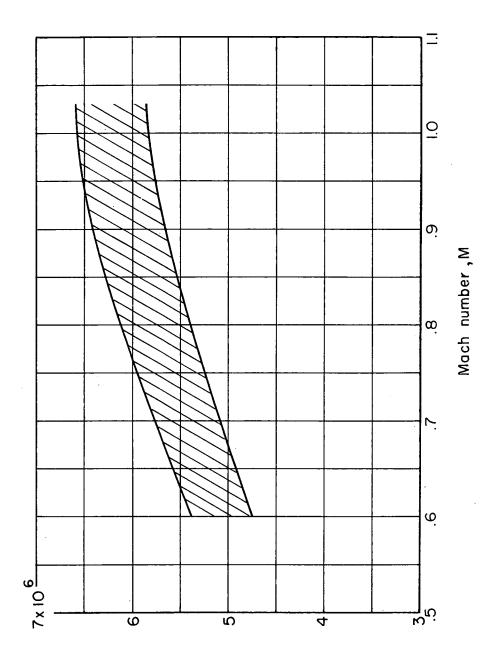
Figure 3.- Variation of Reynolds number based on mean aerodynamic chord with Mach number.
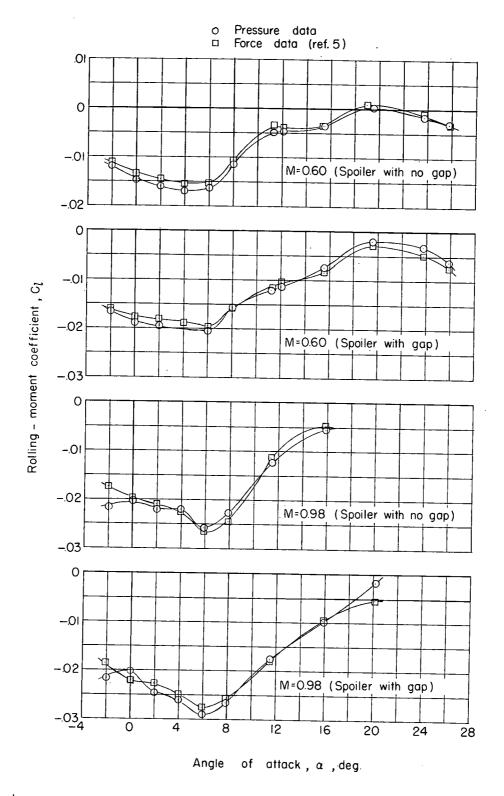
Figure 4.- Comparison of rolling-moment characteristics as obtained from pressure data and from force data for the model with upper-surface spoilers.
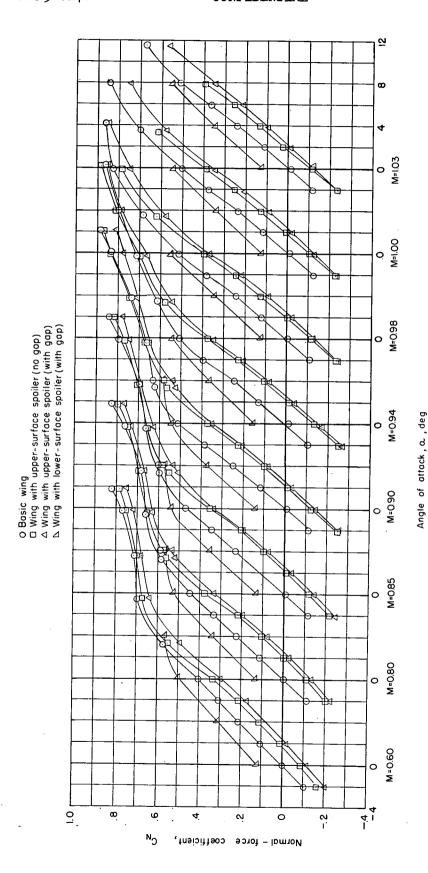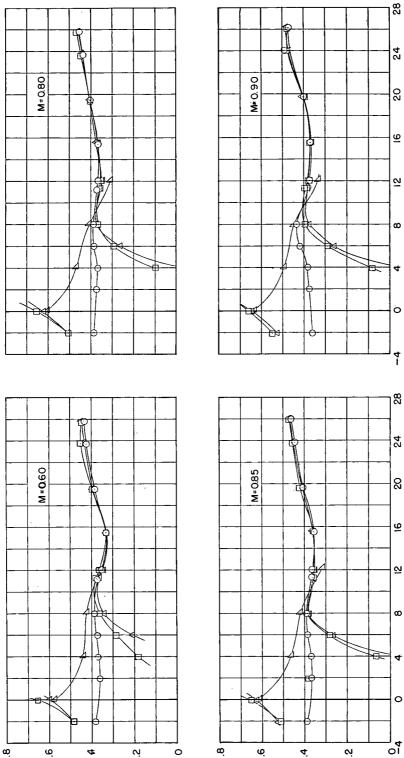
Figure 5.- Wing normal-force characteristics for the basic wing and various spoiler configurations. M = 0.60 to M = 1.03.

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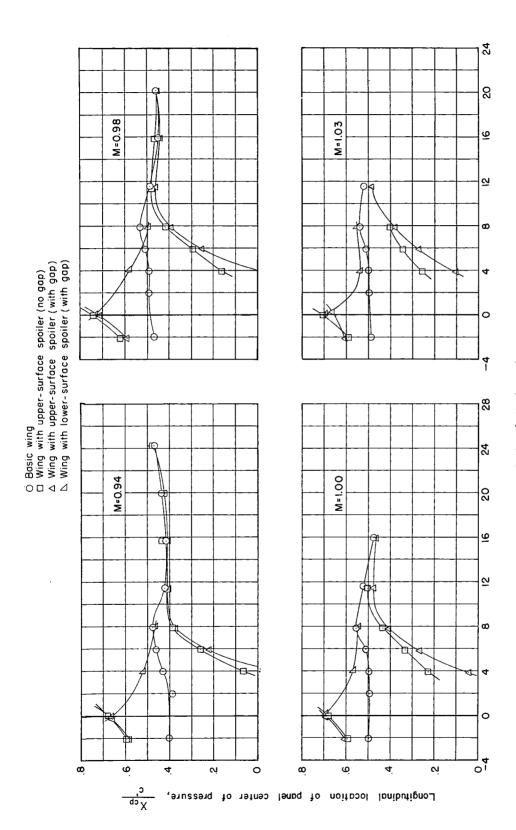
(a) M = 0.60, 0.80, 0.85, 0.90.

Figure 6.- Longitudinal position of wing center of pressure for the basic
wing and various spoiler configurations.

(b) M = 0.94, 0.98, 1.00, 1.03.

Figure 6.- Concluded.
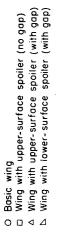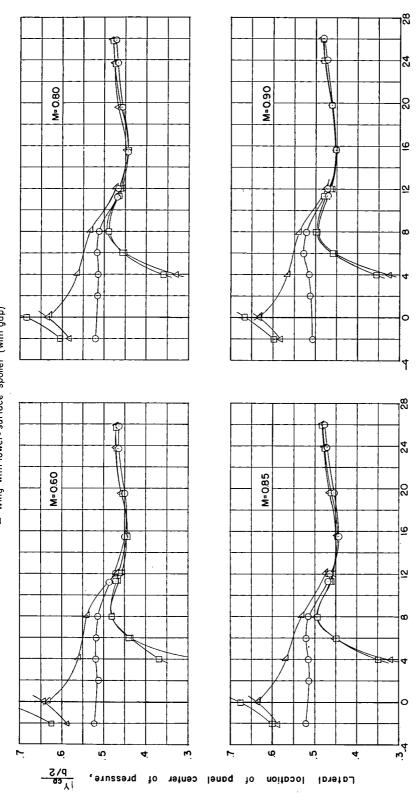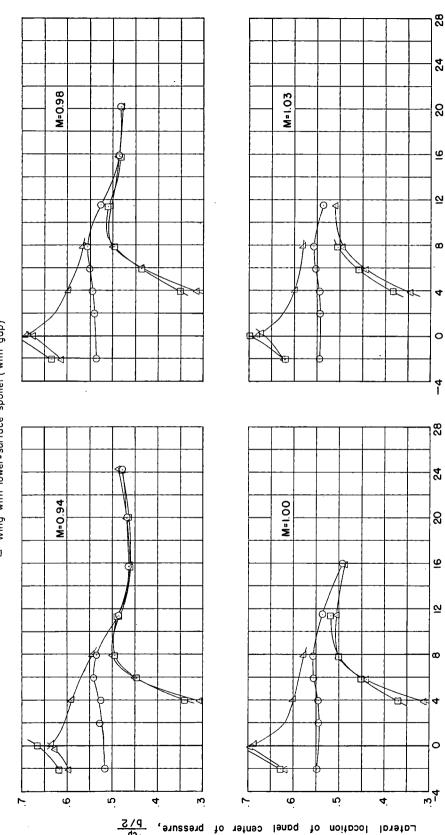
(a) M = 0.60, 0.80, 0.85, 0.90.

Figure 7.- Lateral position of wing center of pressure for the basic and various spoiler configurations.
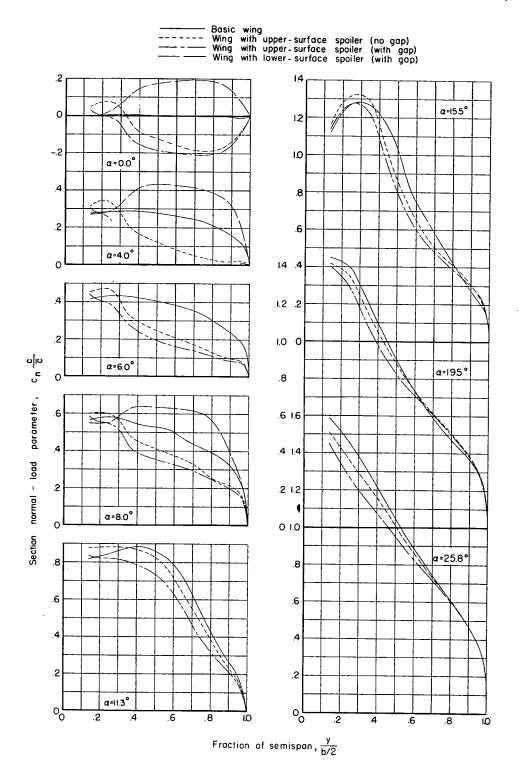
(b) M = 0.94, 0.98, 1.00, 1.03.
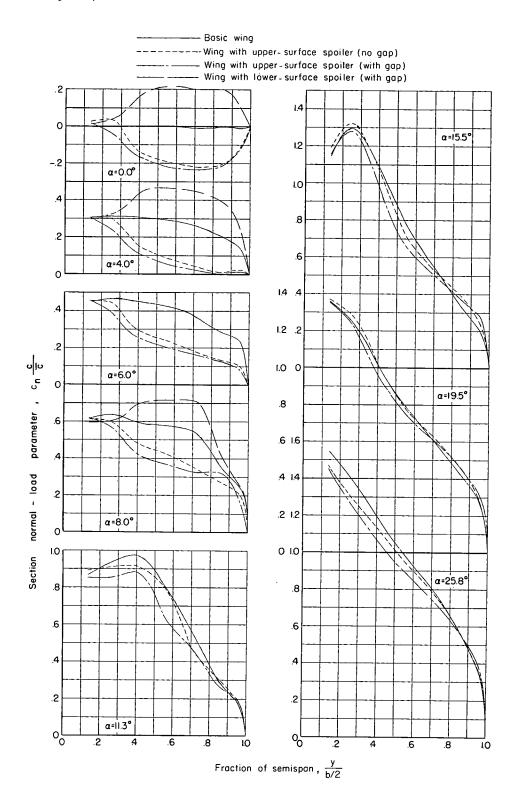
Figure 7.- Concluded.
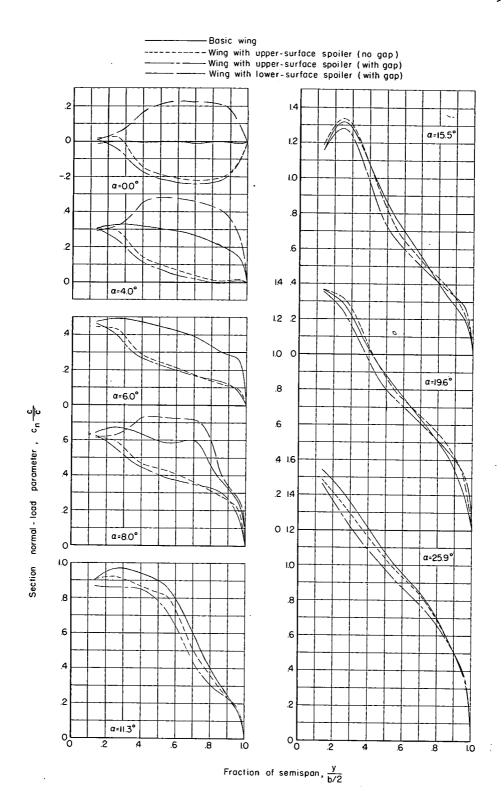
(a)   M = 0.60.

Figure 8.- Wing semispan load distributions for the basic wing and various spoiler configurations.

(b) M = 0.80.

Figure 8.- Continued.

Basic wing
Wing with upper-surface spoiler (no gap)
Wing with upper-surface spoiler (with gap)
Wing with lower-surface spoiler (with gap)

Section normal-load parameter, $c_n \frac{c}{\bar{c}}$

α=0.0°

α=4.0°

α=6.0°

α=8.0°

α=11.3°

α=15.5°

α=19.6°

α=25.9°

Fraction of semispan, $\frac{y}{b/2}$

(c) M = 0.85.

Figure 8.- Continued.

Basic wing
Wing with upper-surface spoiler (no gap)
Wing with upper-surface spoiler (with gap)
Wing with lower-surface spoiler (with gap)

$\alpha = 0.0°$

$\alpha = 4.0°$

$\alpha = 6.0°$

$\alpha = 8.0°$

$\alpha = 11.3°$

$\alpha = 15.6°$

$\alpha = 19.8°$

$\alpha = 26.1°$

Section normal - load parameter, $c_n \frac{c}{\bar{c}}$

Fraction of semispan, $\frac{y}{b/2}$
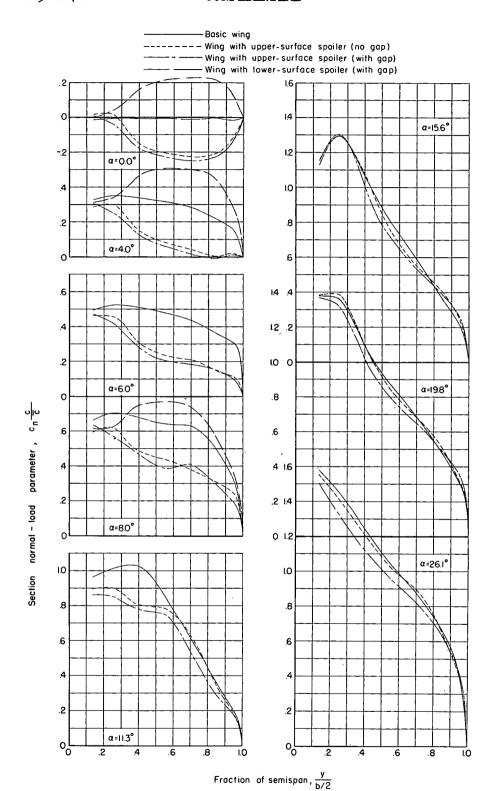
(d) M = 0.90.

Figure 8.- Continued.

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(e)   M = 0.94.

Figure 8.- Continued.

——————— Basic wing
———————— Wing with upper-surface spoiler (no gap)
———— ·— Wing with upper-surface spoiler (with gap)
———— —— Wing with lower-surface spoiler (with gap)

Fraction of semispan, $\frac{y}{b/2}$

(f)   M = 0.98.

Figure 8.- Continued.

Basic wing
Wing with upper-surface spoiler (no gap)
Wing with upper-surface spoiler (with gap)
Wing with lower-surface spoiler (with gap)

(g) M=1.00.

Fraction of semispan, $\frac{y}{b/2}$

Section normal - load parameter , $c_n \frac{c}{\bar{c}}$
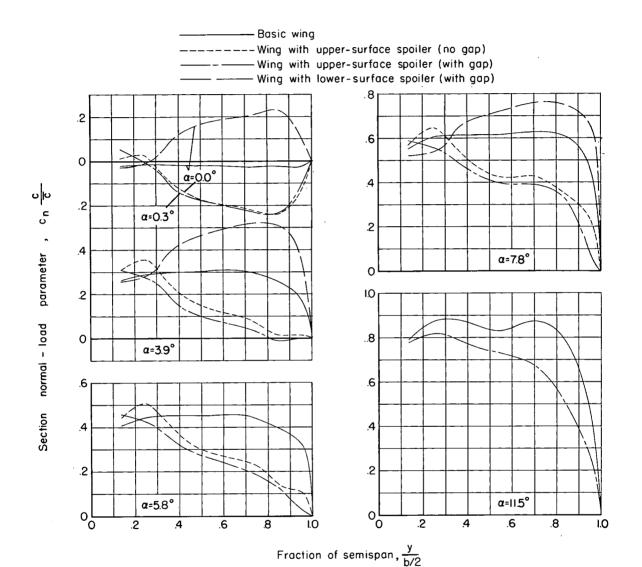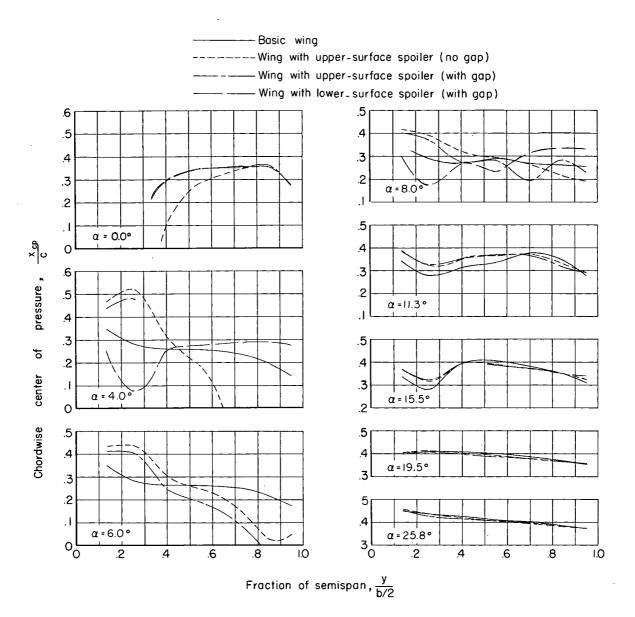
(g)   M = 1.00.

Figure 8.- Continued.
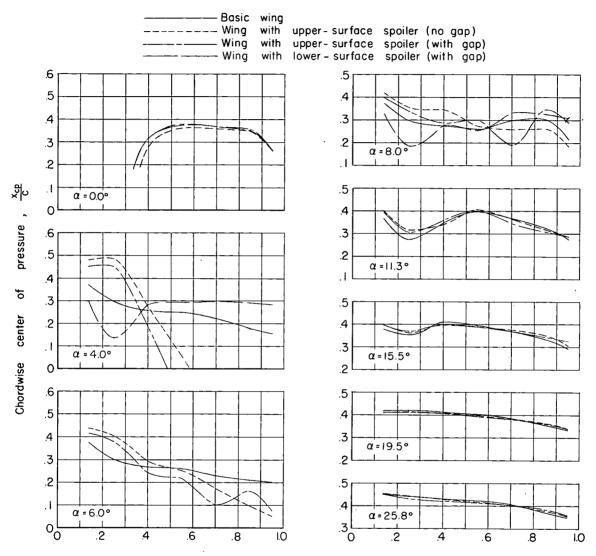
(h)   M = 1.03.

Figure 8.- Concluded.

(a) M = 0.60.
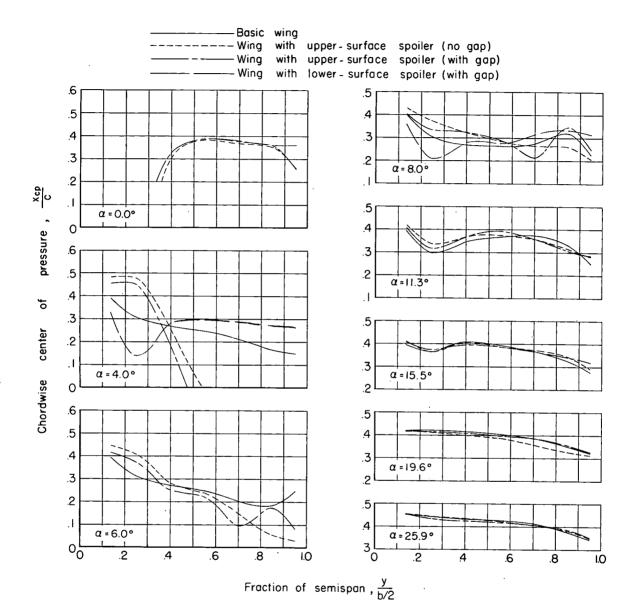
Figure 9.- Wing-section center of pressure across the semispan for the basic wing and various spoiler configurations.
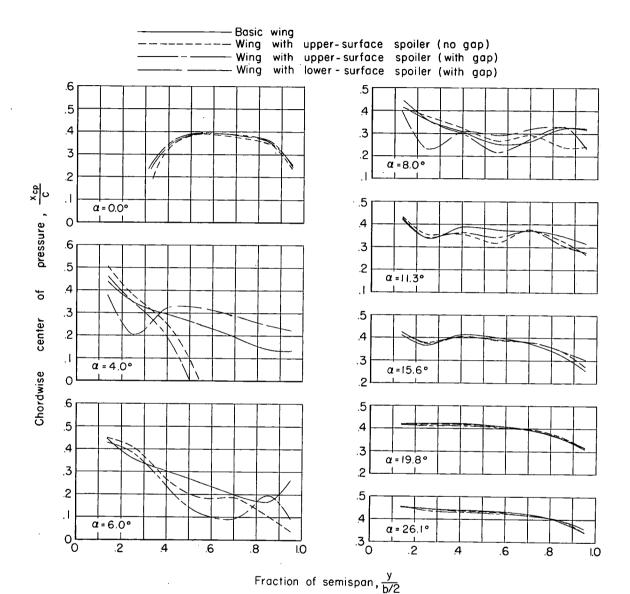
(b)   M = 0.80.

Figure 9.- Continued.

(c) M = 0.85.

Figure 9.- Continued.

Basic wing
Wing with upper-surface spoiler (no gap)
Wing with upper-surface spoiler (with gap)
Wing with lower-surface spoiler (with gap)

Chordwise center of pressure, $\frac{x_{cp}}{c}$

$\alpha = 0.0°$

$\alpha = 4.0°$

$\alpha = 6.0°$

$\alpha = 8.0°$

$\alpha = 11.3°$

$\alpha = 15.6°$

$\alpha = 19.8°$

$\alpha = 26.1°$

Fraction of semispan, $\frac{y}{b/2}$

(d)   M = 0.90.

Figure 9.- Continued.
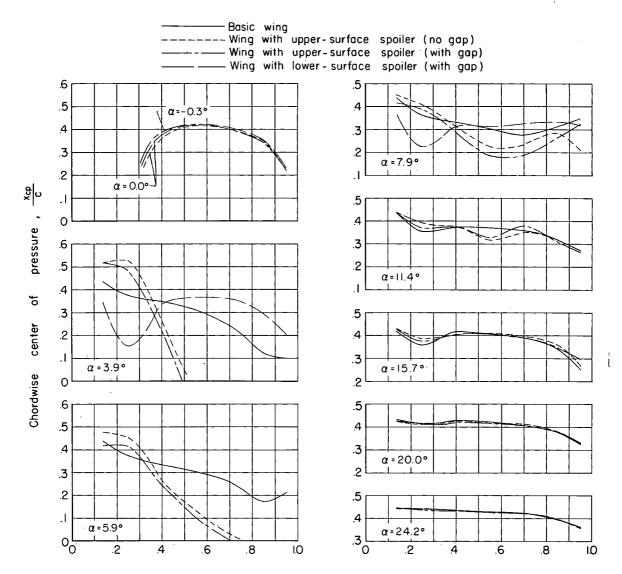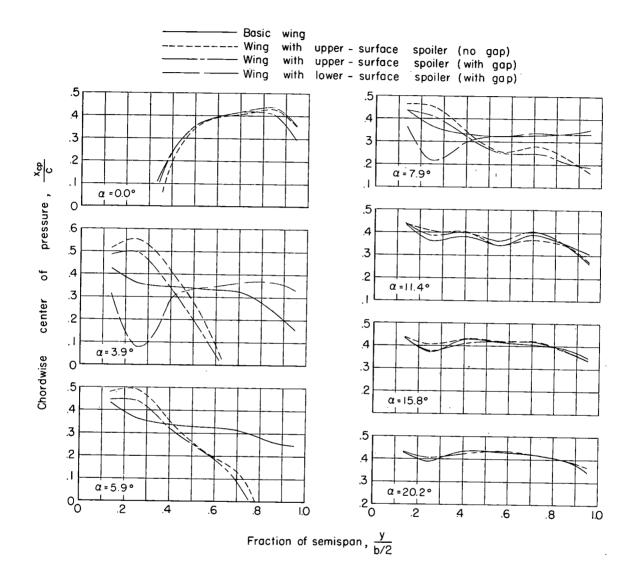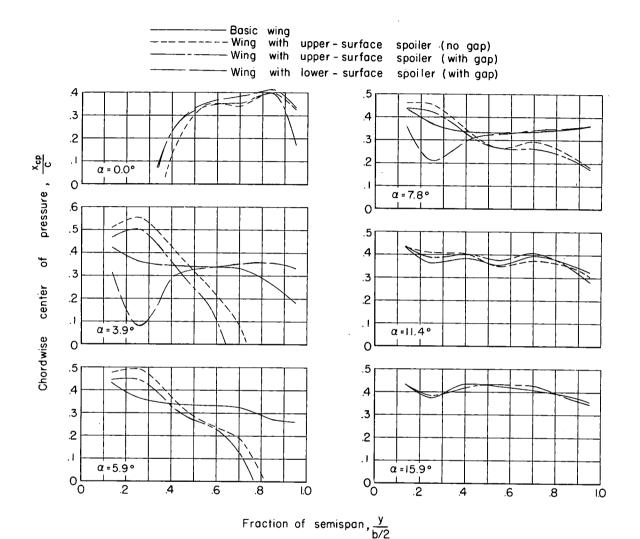
(e) M = 0.94.

Figure 9.- Continued.
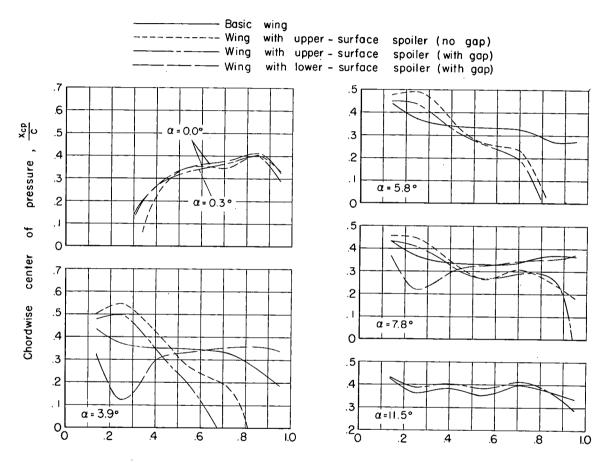
(f)   M = 0.98.

Figure 9.- Continued.

(g) M = 1.00.

Figure 9.- Continued.
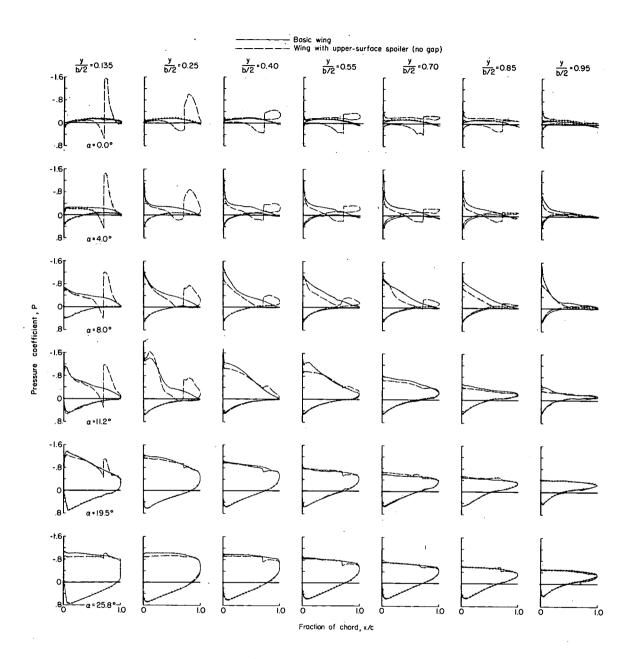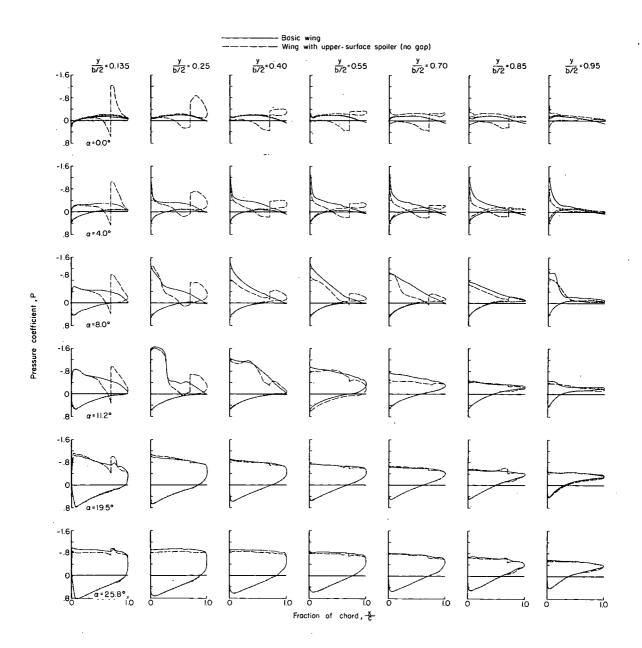
(h) M = 1.03.

Figure 9.- Concluded.

(a) M = 0.60.

Figure 10.- Chordwise pressure distributions on the wing; basic wing
    compared with the upper-surface spoiler (no gap) configuration.

(b)   M = 0.80.

Figure 10.- Continued.

(c)   M = 0.90.
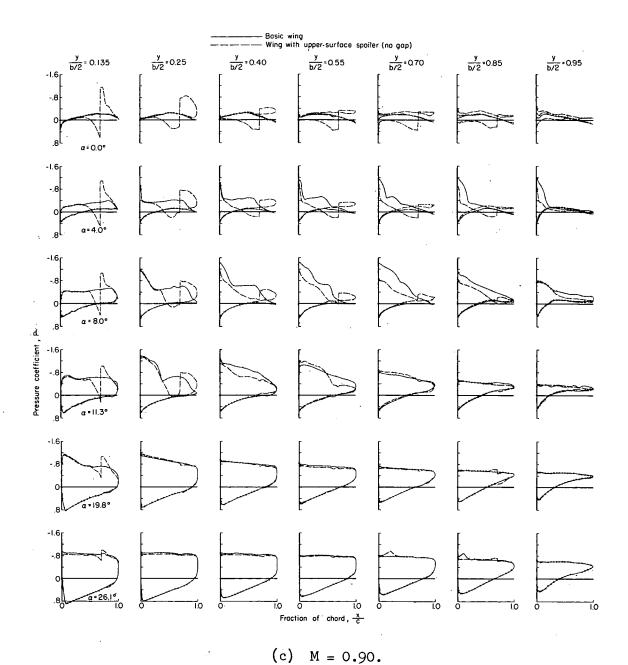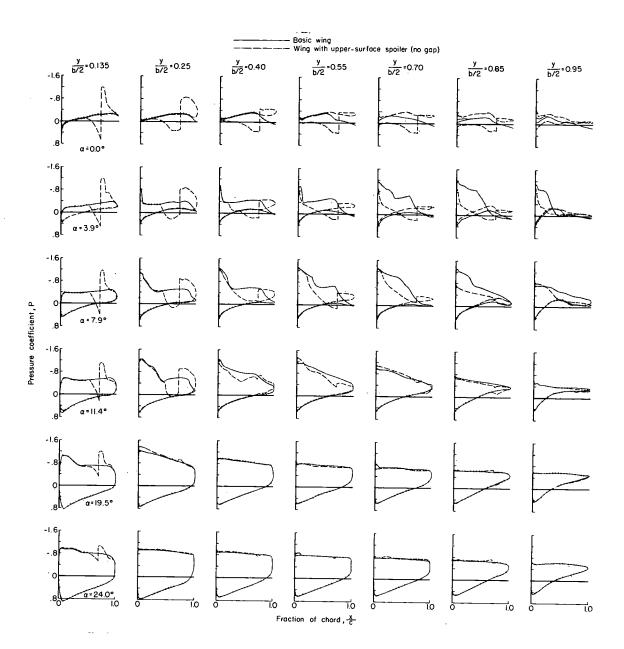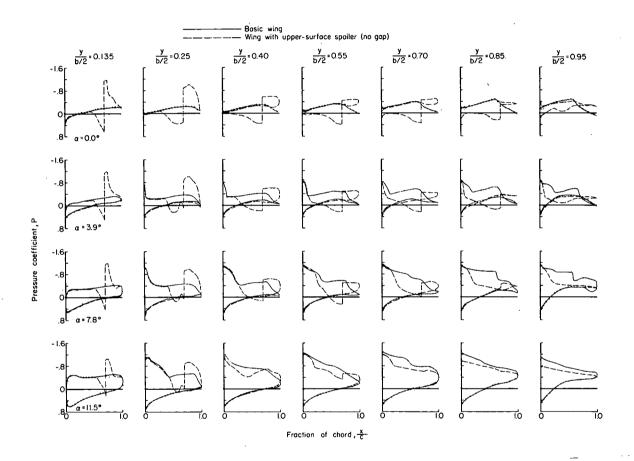
Figure 10.- Continued.

(d)   M = 0.94.

Figure 10.- Continued.

(e) M = 1.00.

Figure 10.- Concluded.
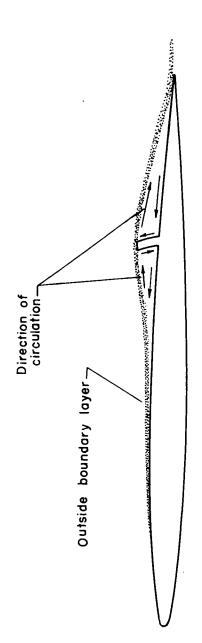
Figure 11.- Concept of flow in the boundary layer at a typical wing-spoiler section for a Mach number of 0.60.

(a)   M = 0.60.
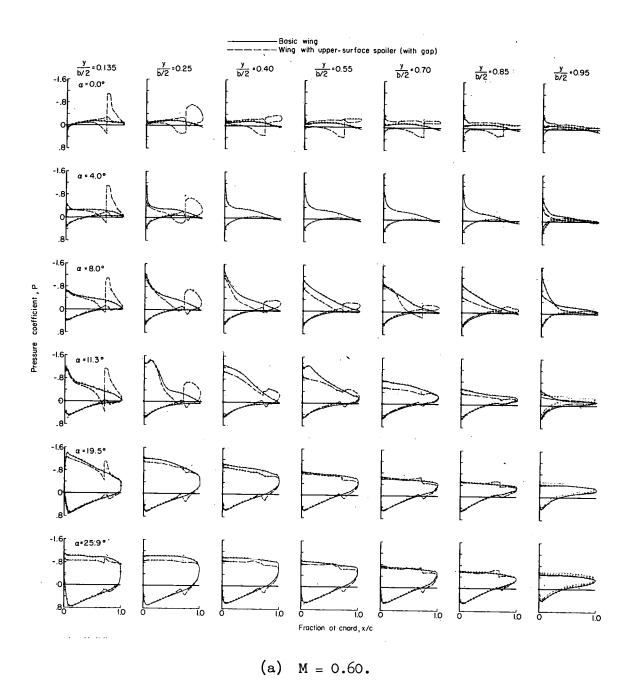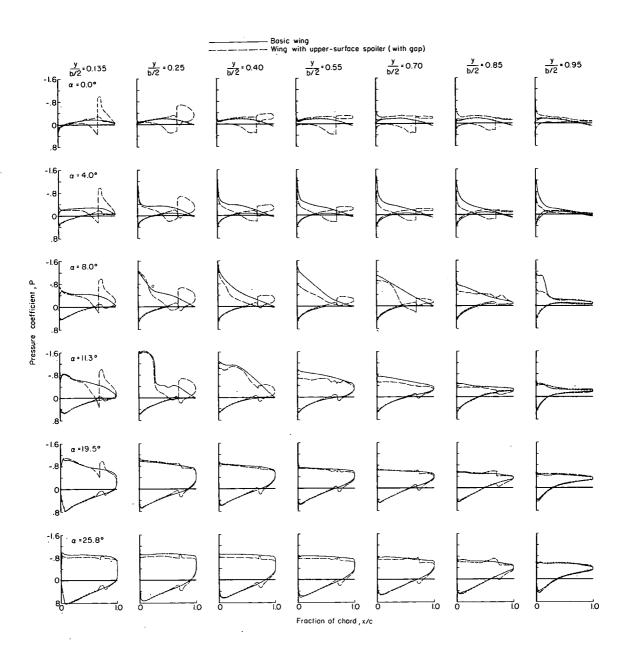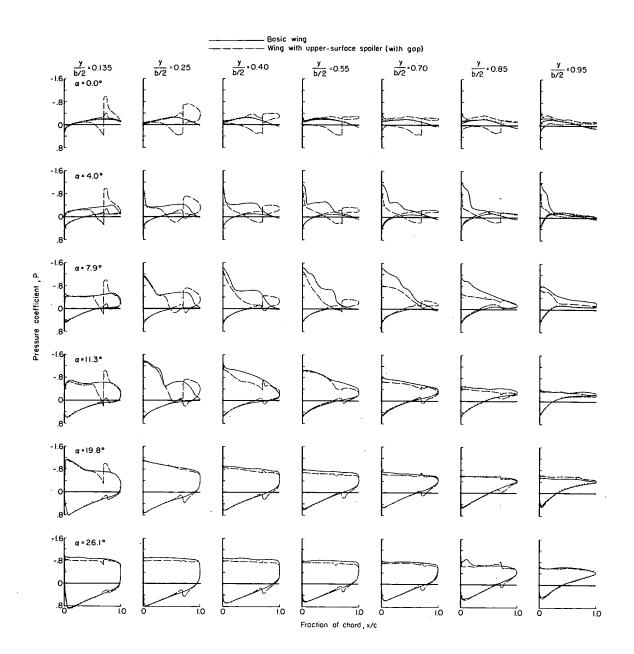
Figure 12.- Chordwise pressure distributions on the wing; basic wing
    compared with the upper-surface spoiler (with gap) configuration.
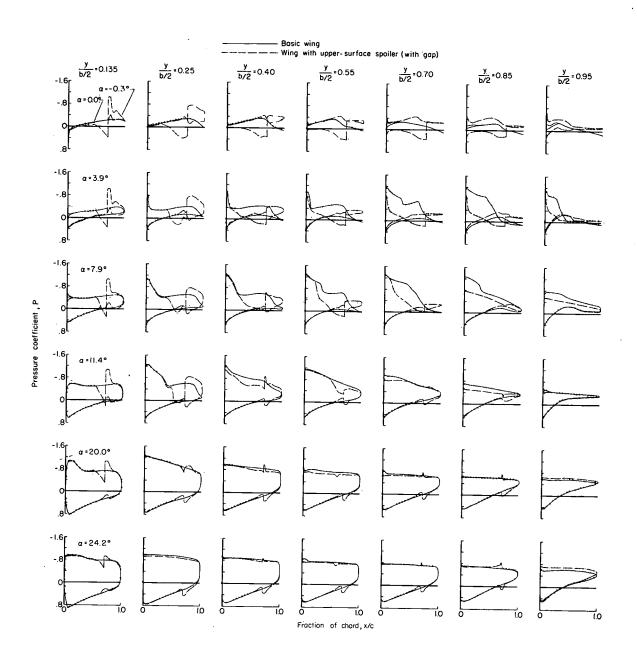
(b)   M = 0.80.

Figure 12.- Continued.
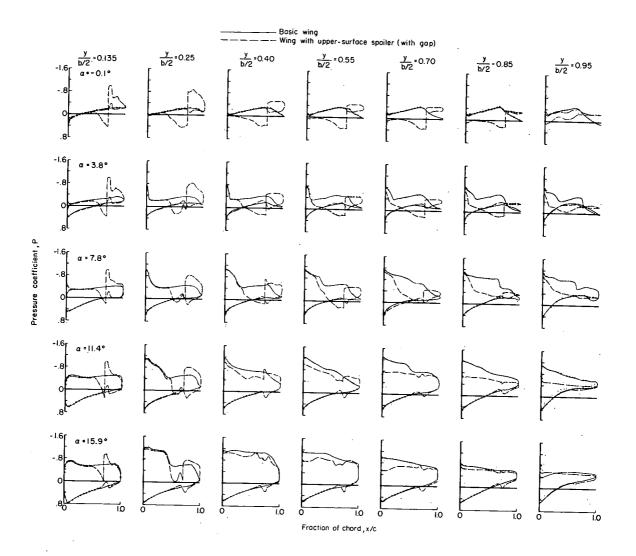
(c) M = 0.90.

Figure 12.- Continued.

(d)　M = 0.94.

Figure 12.- Continued.

(e) M = 1.00.

Figure 12.- Concluded.
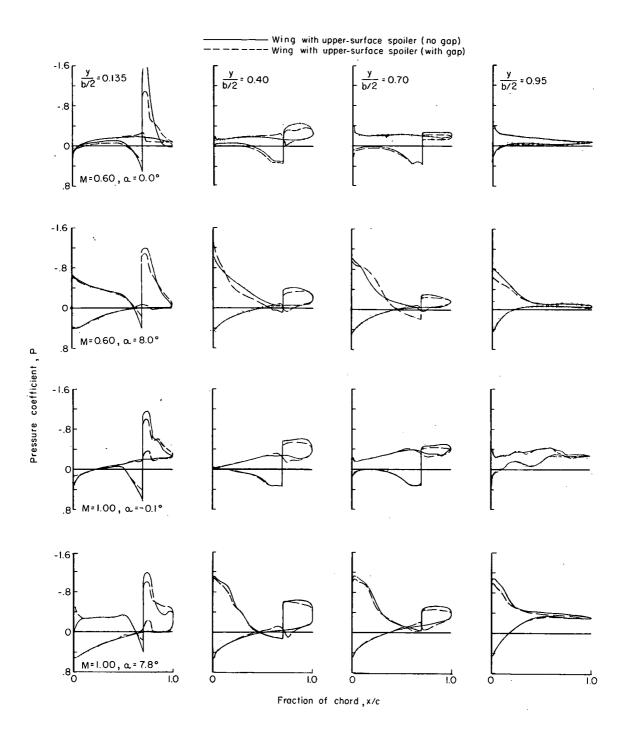
Figure 13.- Effect of wing gap behind an upper-surface spoiler on wing chordwise pressure distributions.

(a) M = 0.60.
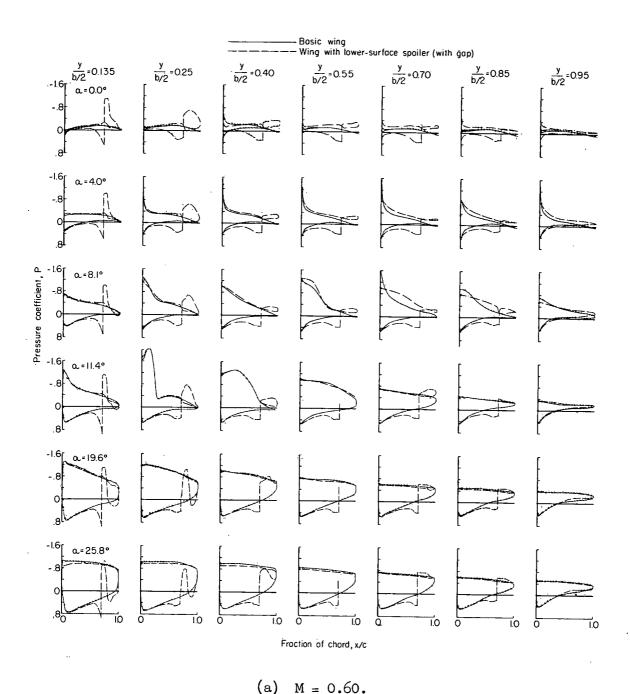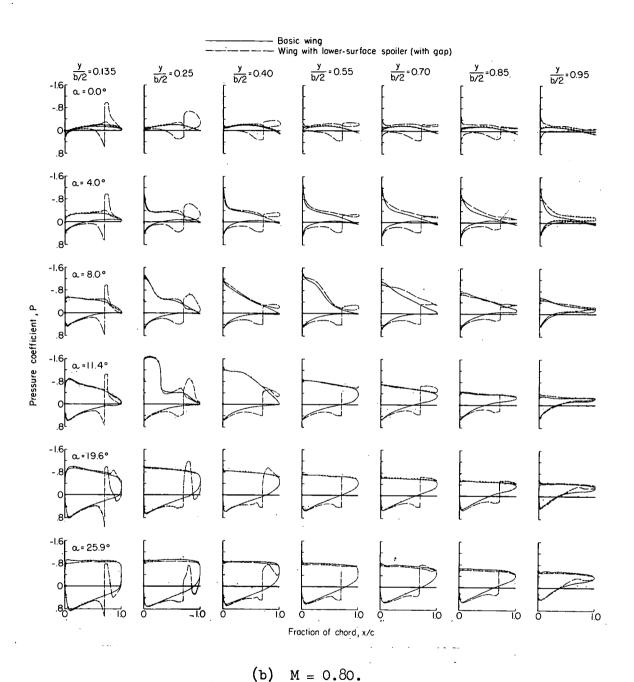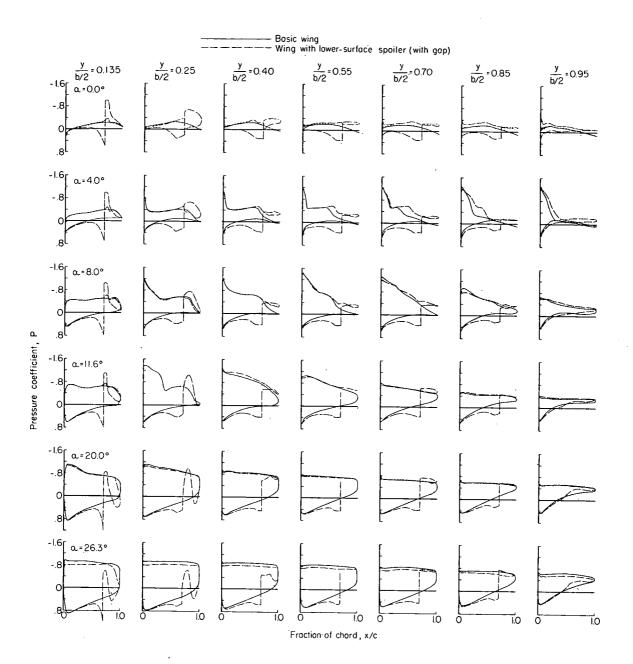
Figure 14.- Chordwise pressure distributions on the wing; basic wing compared with the lower-surface spoiler (with gap) configuration.

(b)   M = 0.80.
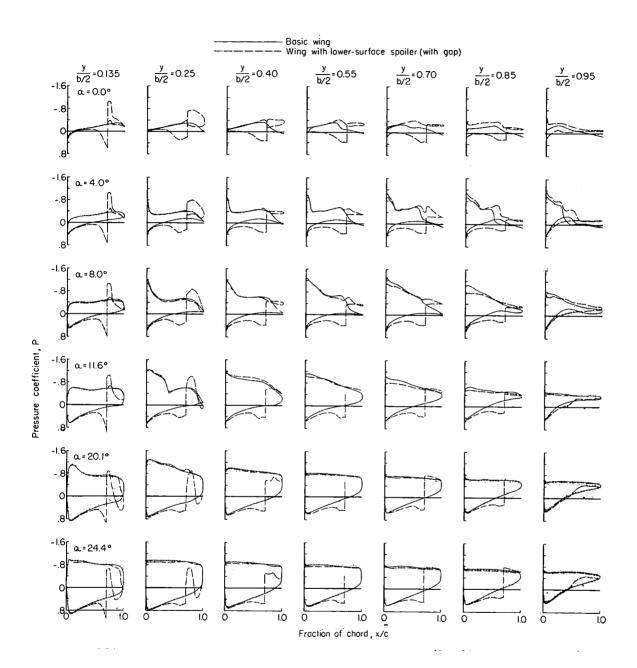
Figure 14.- Continued.
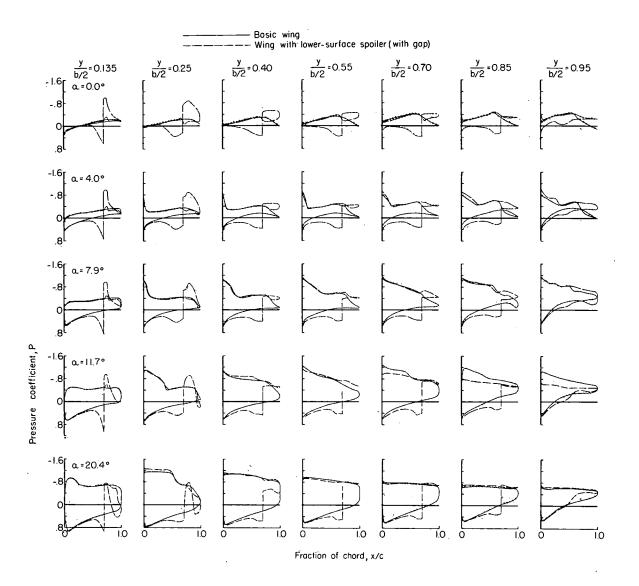
(c)   M = 0.90.

Figure 14.- Continued.
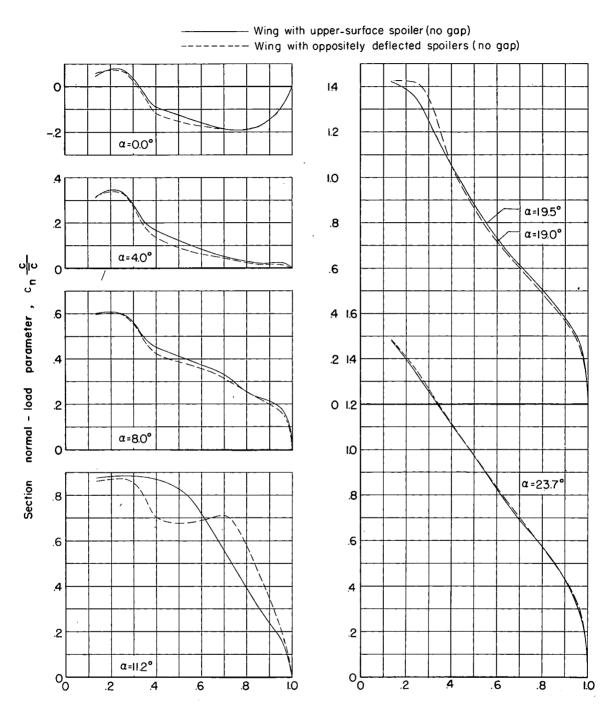
(d)   M = 0.94.

Figure 14.- Continued.

(e) M = 1.00.

Figure 14.- Concluded.

—————— Wing with upper-surface spoiler (no gap)
- - - - - - - Wing with oppositely deflected spoilers (no gap)
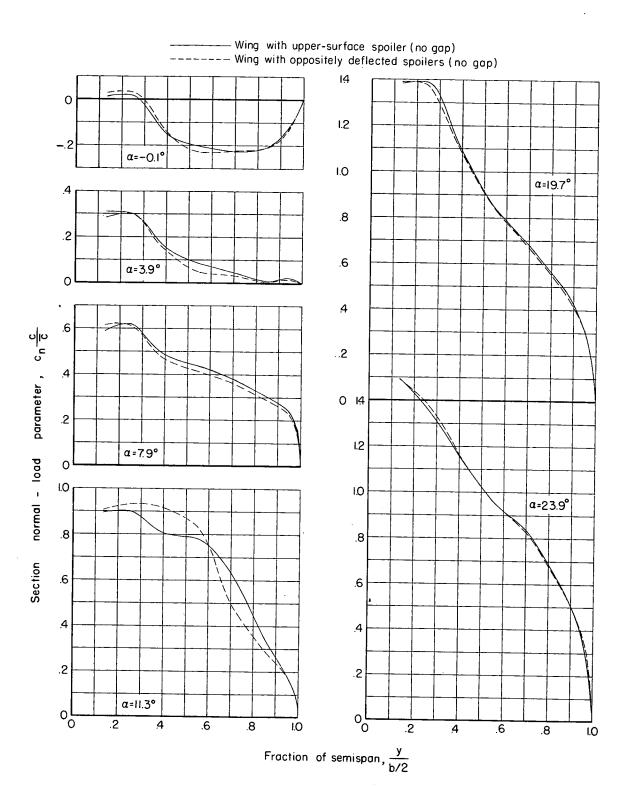
Fraction of semispan, $\frac{y}{b/2}$
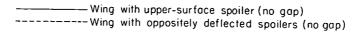
(a) M = 0.60.
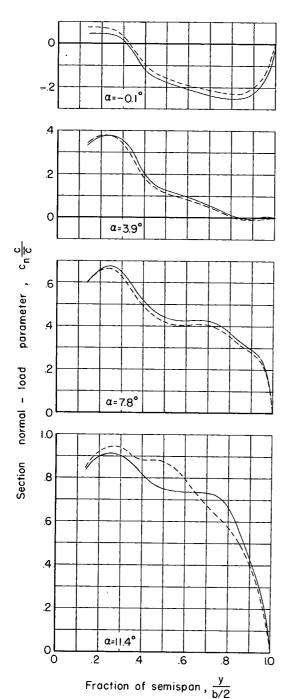
Figure 15.- Effect of .a lower-surface spoiler on the opposite wing semi-
span load distribution for the upper-surface spoiler (no gap)
configuration.
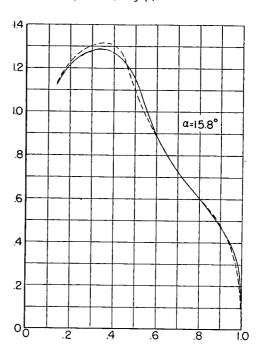
(b) M = 0.90.

Figure 15.- Continued.

(c)   M = 0.98.

Figure 15.- Concluded.
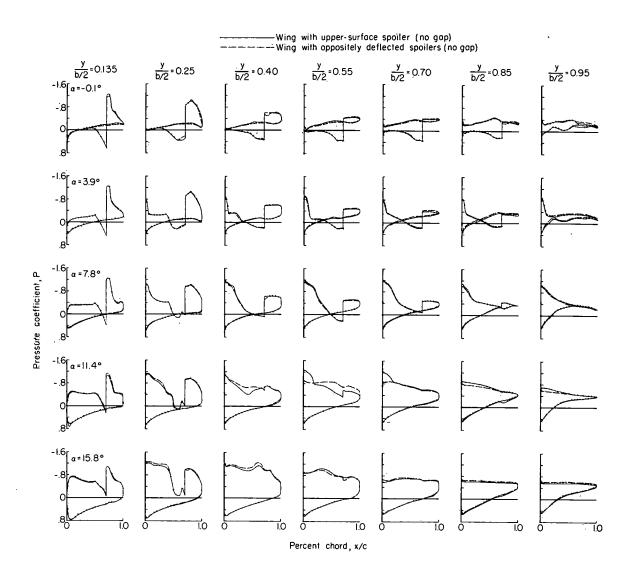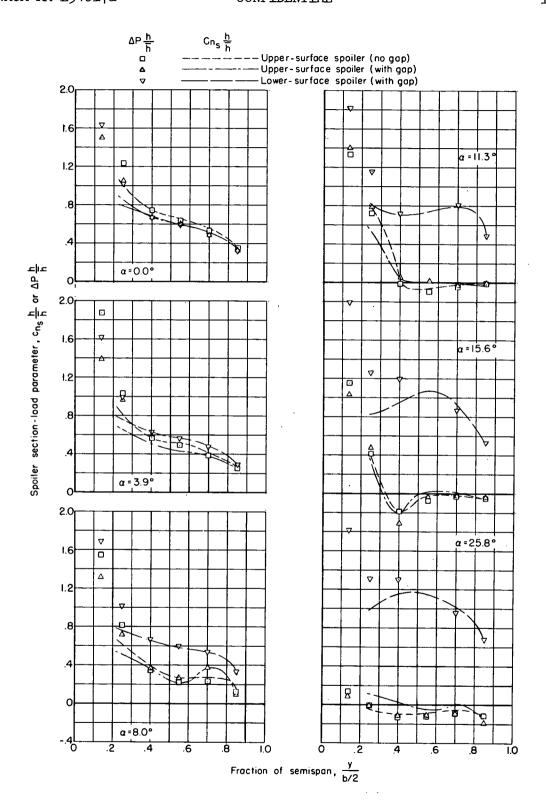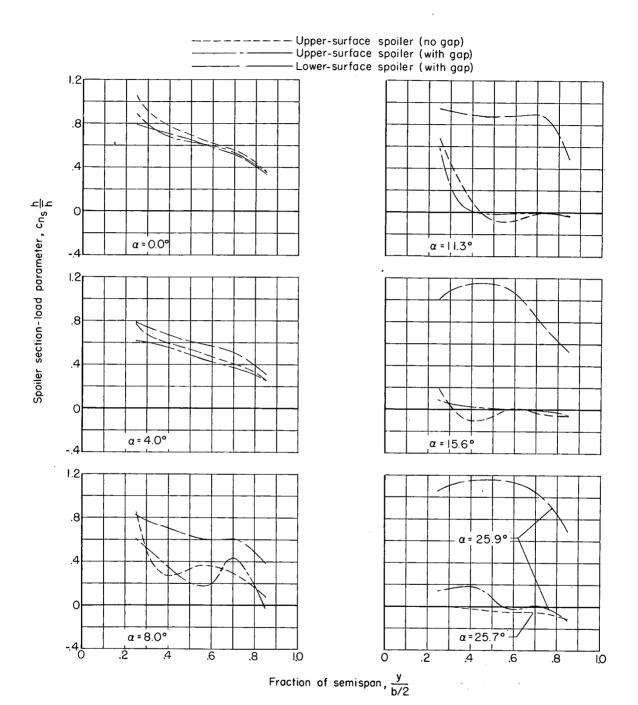
Figure 16.- Effect of a lower-surface spoiler on the opposite wing chord-wise pressure distributions for the upper-surface spoiler (no gap) configuration. M = 0.98.
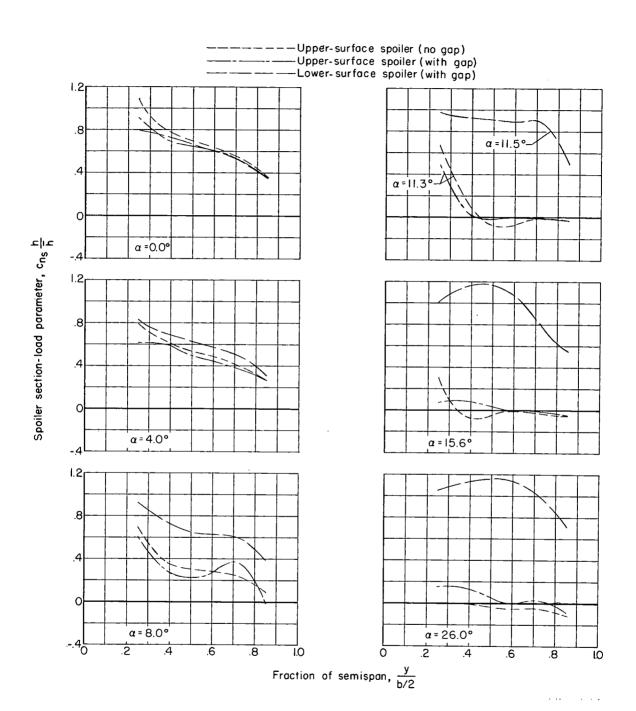
(a) M = 0.60.

Figure 17.- Spoiler load distributions.
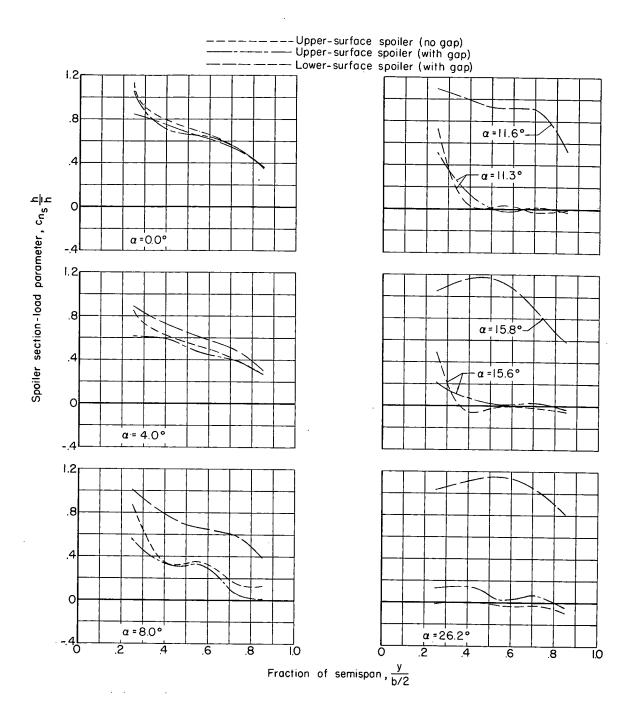
(b) M = 0.80.

Figure 17.- Continued.
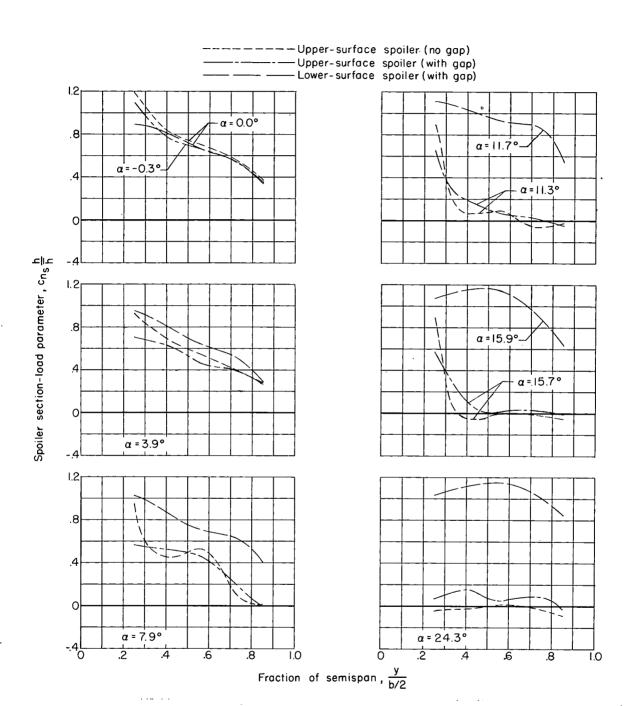
(c) M = 0.85.

Figure 17.- Continued.
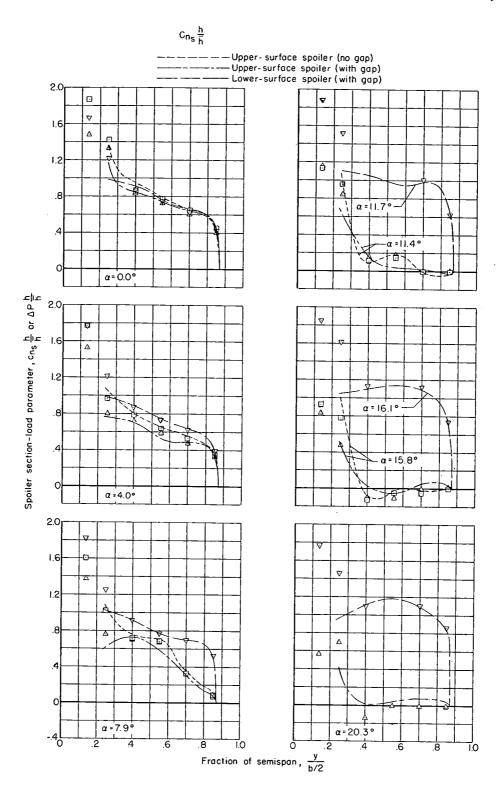
(d) M = 0.90.

Figure 17.- Continued.
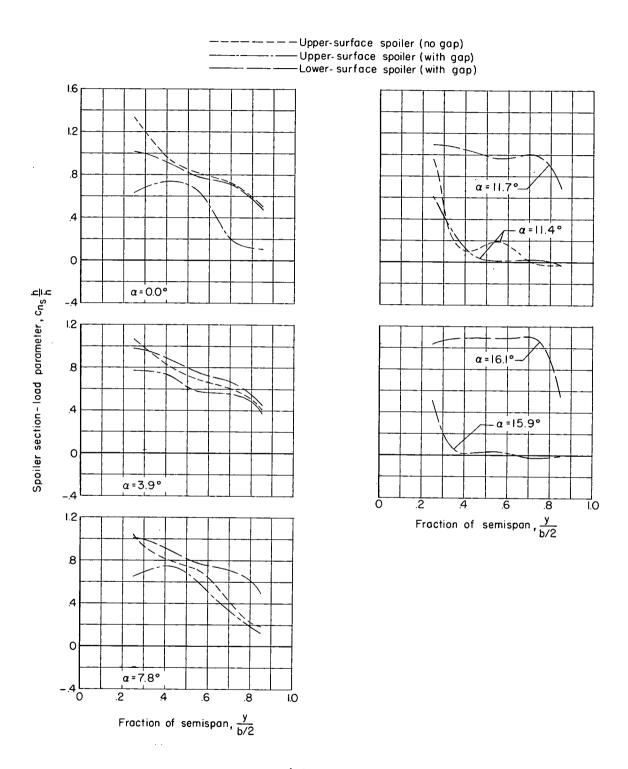
(e)   M = 0.94.

Figure 17.- Continued.
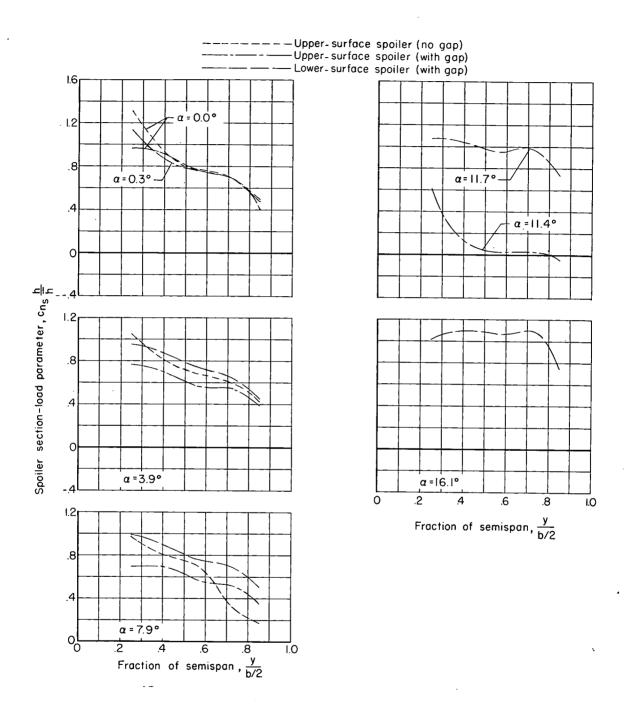
(f)   M = 0.98.

Figure 17.- Continued.
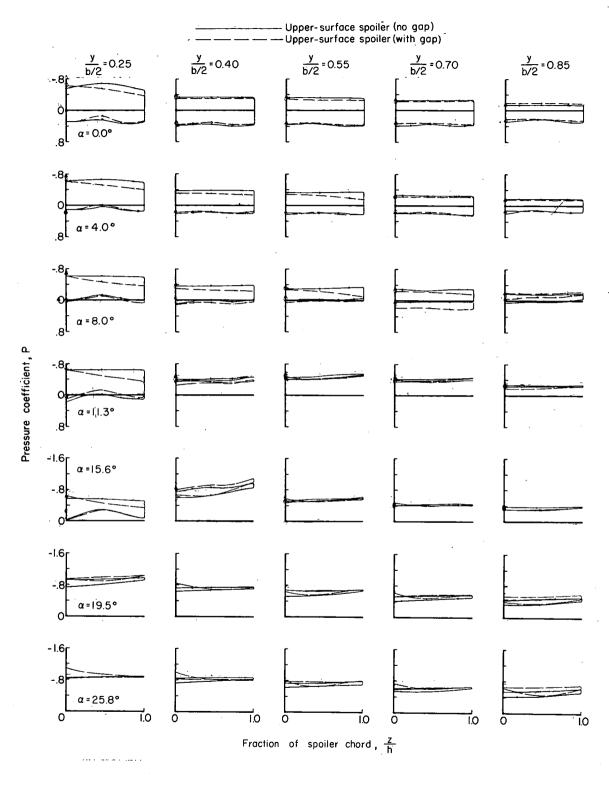
(g)   M = 1.00.

Figure 17.- Continued.
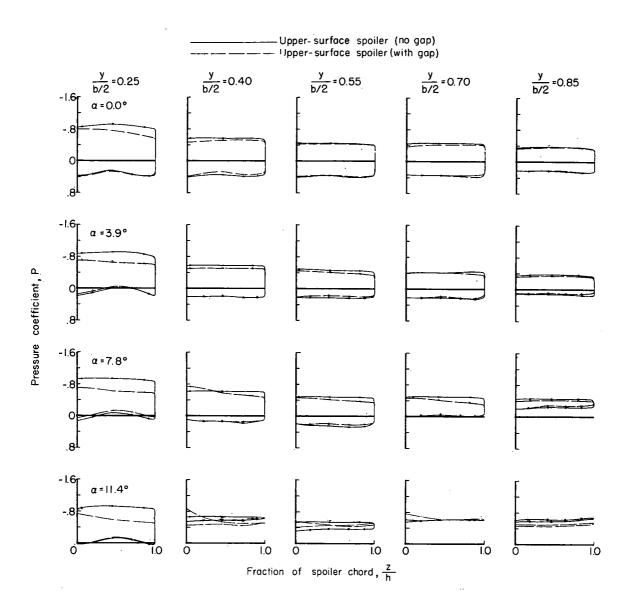
(h)   M = 1.03.

Figure 17.- Concluded.
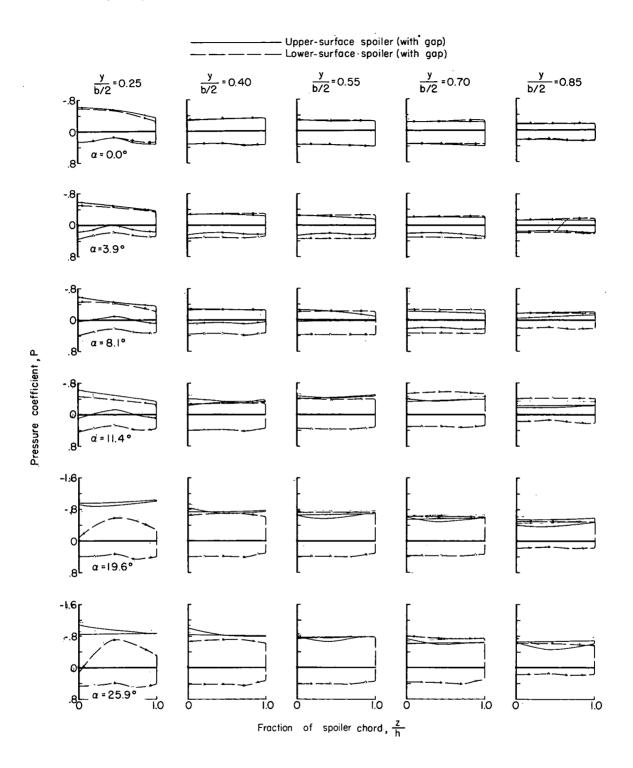
(a)   M = 0.60.

Figure 18.- Section pressure distributions on the spoiler; upper-surface
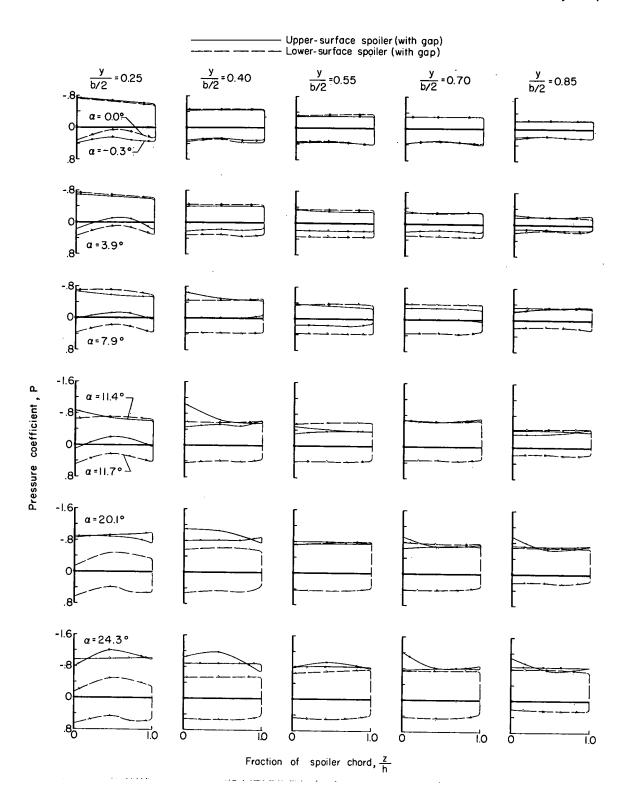   spoiler (with gap) compared with the upper-surface (no gap) configuration.

(b)   M = 1.00.

Figure 18.- Concluded.

Upper-surface spoiler (with gap)
Lower-surface·spoiler (with gap)

$\dfrac{y}{b/2}$ =0.25 $\dfrac{y}{b/2}$ = 0.40 $\dfrac{y}{b/2}$ =0.55 $\dfrac{y}{b/2}$ =0.70 $\dfrac{y}{b/2}$ =0.85

Pressure coefficient, P

α = 0.0°

α = 3.9°

α = 8.1°

α = 11.4°

α = 19.6°

α = 25.9°

Fraction of spoiler chord, $\dfrac{z}{h}$

(a) M = 0.60.

Figure 19.- Section pressure distributions on the spoiler; upper-surface
spoiler (with gap) compared with the lower-surface spoiler (with gap)
configuration.

Upper-surface spoiler (with gap)
Lower-surface spoiler (with gap)

(b)   M = 0.94.

Figure 19.- Concluded.